

Installing Rational ClearQuest

support@rational.com
<http://www.rational.com>

Rational
the e-development company™

IMPORTANT NOTICE

COPYRIGHT NOTICE

ClearQuest, copyright © 1997–2000 Rational Software Corporation. All rights reserved.

THIS DOCUMENT IS PROTECTED BY COPYRIGHT AND CONTAINS INFORMATION PROPRIETARY TO RATIONAL. ANY COPYING, ADAPTATION, DISTRIBUTION, OR PUBLIC DISPLAY OF THIS DOCUMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF RATIONAL IS STRICTLY PROHIBITED. THE RECEIPT OR POSSESSION OF THIS DOCUMENT DOES NOT CONVEY ANY RIGHTS TO REPRODUCE OR DISTRIBUTE ITS CONTENTS, OR TO MANUFACTURE, USE, OR SELL ANYTHING THAT IT MAY DESCRIBE, IN WHOLE OR IN PART, WITHOUT THE SPECIFIC WRITTEN CONSENT OF RATIONAL.

U.S. GOVERNMENT RIGHTS NOTICE

U.S. GOVERNMENT RIGHTS. Use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth in the applicable Rational License Agreement and in DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii) (Oct 1988), FAR 12.212(a) 1995, FAR 52.227-19, or FAR 52.227-14, as applicable.

TRADEMARK NOTICE

Rational, the Rational logo, ClearQuest, and ClearCase are trademarks or registered trademarks of Rational Software Corporation in the United States and in other countries.

Visual Basic, Windows NT, and Microsoft are trademarks or registered trademarks of the Microsoft Corporation. All other names are used for identification purposes only and are trademarks or registered trademarks of their respective companies.

U.S. PATENT NOTICE

U.S. Registered Patent Nos. 5,193,180 and 5,335,344 and 5,535,329. Licensed under Sun Microsystems Inc.'s U.S. Pat. No. 5,404,499. Other U.S. and foreign patents pending.

Printed in the U.S.A.

Part Number: 800-023977-000

1	Installing ClearQuest	
	Before you begin	.8
	Understanding the install process	.9
2	Configuring vendor databases	
	Choosing a database vendor	.12
	Setting up Microsoft Access	.13
	Setting up SQL Anywhere	.14
	Defining user privileges	.14
	Creating an SQL Anywhere database server	.16
	Setting up Microsoft SQL Server Version 6.5	.19
	Registering your SQL Server machine for SQL Server 6.5	.19
	Setting up SQL Server 6.5 databases	.20
	Setting up Microsoft SQL Server 7 and 2000	.24
	Registering your SQL Server machine for SQL Server	.24
	Creating a new SQL Server 7 database	.25
	Creating SQL Server logins	.26
	Migrating from SQL Server 6.5	.27
	Ensuring SQL Server 7 Client Connectivity	.27
	Setting up the Oracle Server	.28
	Configuring an Oracle client installation for ClearQuest Windows	29
	Enhancing search capabilities	.30
	For ClearQuest Unix clients	.31
	Setting up IBM DB2 6.1	.35
	Creating a new DB2 database	.35
	Creating a DB2 alias on client machine	.35
3	Installing ClearQuest for an administrator	
	Installing ClearQuest for an administrator	.38
	Creating ClearQuest databases	.39
	Creating a schema repository	.39
	Creating a user database	.42
	Setting up configuration management integrations	.44

Integrating with Rational ClearCase	44
Integrating with Microsoft Visual SourceSafe	45
Setting up record submission via e-mail	48
Installing Crystal Reports	49
4 Installing ClearQuest Windows for end-users	
Connecting to ClearQuest databases	52
Enabling e-mail notification	54
5 Installing ClearQuest Unix for end-users	
Understanding the install process	56
Installing ClearQuest Unix client and Oracle Support	57
Running ClearQuest Unix	60
Enabling e-mail notification	61
6 Setting Up ClearQuest Web	
Understanding the installation process	64
Setting up ClearQuest Web for IIS 4	65
Setting up an anonymous user account for IIS 4	65
Creating a cache directory for IIS 4	68
Configuring IIS 4.0 to serve ClearQuest Web pages	69
Setting Up ClearQuest Web for IIS 5	77
Setting up an anonymous user account for IIS 5	77
Creating a cache directory for IIS 5	81
Configuring IIS 5 to serve ClearQuest Web pages	83
Enabling e-mail notification for web clients	94
Set up registry key access privileges	96
Providing ClearQuest Web information to web clients	98
Using the Advanced Query editor	98
7 Upgrading ClearQuest	
Understanding the upgrade process	100
Preparing to upgrade	101

Performing a test upgrade	102
Database locking	102
Upgrade steps	103
Unlocking your original databases	105
Performing the production upgrade	107
Upgrading clients	108
Upgrading ClearQuest Web	109
8 Licensing ClearQuest	
Working with Rational Software licensing	112
9 Silent Installation of Rational ClearQuest	
Silent Installation of Rational ClearQuest	113
Overview of Silent Installations of Rational ClearQuest	113
Recording a Software Installation of Rational ClearQuest	114
Example	114
Specifying a Post-Installation Command	115
Performing a Silent Software Installation	116
Preparing Multiple Response Files	116
Examples	117
RSSetup Command Syntax	118
Syntax	118
License Key Administrator Command Line	121
License Key Administrator Syntax	121
10 Index	
Index 117	

1

Installing ClearQuest

This chapter describes how to install ClearQuest. You, the ClearQuest administrator, set up the databases to use with ClearQuest, install ClearQuest, and provide the required setup information to each client user. You (or your client users) can then install ClearQuest on the client machines.

It's important that you review all the necessary steps before beginning.

This chapter covers the following topics:

- “Before you begin” on page 8
- “Understanding the install process” on page 9

Before you begin

Before you install ClearQuest, read the following:

- *Rational ClearQuest Release Notes*: An HTML file that contains the most current system requirements information (including platform version support).
 - For Windows: <d>:\ClearQuest\readme.htm (where <d> is your CD-ROM drive)
 - For Unix: <d>:/products/ClearQuestClient/readme.htm (where <d> is your CD-ROM drive)
- *Introducing Rational ClearQuest*: An overview of ClearQuest components and how to use them.
- *Administering Rational ClearQuest*: A guide on how to customize ClearQuest to meet your needs.

Note: If you are using Rational ClearQuest/TeamTest Edition, see the Getting Started with Rational ClearQuest TeamTest Guide This guide is available as a Portable Document Format (PDF) file in the \\ClearQuest\books directory.

Understanding the install process

You, the ClearQuest administrator, install ClearQuest by performing the following steps:

- 1** Set up your database product. As the ClearQuest administrator, you are responsible for setting up the databases your users will use with ClearQuest. See “Configuring vendor databases” on page 11.
- 2** Install ClearQuest on the administrator’s workstation and create the ClearQuest databases. See “Installing ClearQuest for an administrator” on page 37.

An administrative installation of ClearQuest involves the following steps:

- “Installing ClearQuest for an administrator” on page 38
 - “Creating ClearQuest databases” on page 39
 - “Setting up configuration management integrations” on page 44
 - “Setting up record submission via e-mail” on page 48
 - “Installing Crystal Reports” on page 49
- 3** Set up your license server. See “Licensing ClearQuest” on page 111.
 - 4** Optionally, customize your installation. See the *Administering Rational ClearQuest* guide for details on customizing ClearQuest.
 - 5** Install ClearQuest on the client machines and provide users with the information they need to connect to ClearQuest. See “Installing ClearQuest Windows for end-users” on page 51 and “Installing ClearQuest Unix for end-users” on page 55.
 - 6** If you are installing ClearQuest Web, see “Setting Up ClearQuest Web” on page 63.

2

Configuring vendor databases

Before you install Rational ClearQuest, you install and configure the vendor databases that you will use with ClearQuest.

ClearQuest requires at least two databases:

- A schema repository: This is the master database where ClearQuest stores schemas.
- A user database: This is where data entered by ClearQuest client and web users is stored. You can have as many user databases as you need.

This chapter covers the following topics:

- “Choosing a database vendor” on page 12
- “Setting up Microsoft Access” on page 13
- “Setting up SQL Anywhere” on page 14
- “Setting up Microsoft SQL Server Version 6.5” on page 19
- “Setting up Microsoft SQL Server 7 and 2000” on page 24
- “Setting up the Oracle Server” on page 28
- “Setting up IBM DB2 6.1” on page 35

Choosing a database vendor

ClearQuest supports the following databases:

- Entry-level database: Microsoft Access (supplied with ClearQuest)
- Mid-level database: Sybase SQL Anywhere (supplied with ClearQuest)
- High-end databases: Microsoft SQL Server and Oracle (NT and Unix)

For specific supported versions, see *ClearQuest Release Notes*:

- For Windows: <d>:\ClearQuest\readme.htm (where <d> is your CD-ROM drive)
- For Unix: <d>:/products/ClearQuestClient/readme.htm (where <d> is your CD-ROM drive)

Note: If your ClearQuest installation will include ClearQuest Unix clients, your vendor database must be Oracle and it must be installed on a Unix server.

To decide which database vendor is best for your needs, determine how many simultaneous users you expect to have. Use the following general guidelines:

- For initial testing and evaluation or for small groups (fewer than five users), you can use the entry-level database.
- For small- to medium-size groups (five to twenty users), you can use the mid-level database.
- For larger groups (over twenty users), large amounts of data, or to achieve better performance, use one of the high-end databases.

Note: You can use more than one database vendor for ClearQuest databases. For example, you might want to use high-end databases for your schema repository and user databases, then use an entry- or mid-level database for your test database.

Setting up Microsoft Access

Note: ClearQuest Web does not support Microsoft Access databases.

If you are using ClearQuest with Microsoft Access,

- 1** Create one shared directory on the machine for the directory that will contain your Microsoft Access databases.
- 2** Make a note of the UNC path of the share directory. The path should be of the form:

```
\\<machine_name>\<share_name>\<database_directory>\
```

For example:

```
\\developmentserver\project34share\clearquestdbs\
```

The first time you run the ClearQuest, you are asked to create a schema repository. You will specify this pathname and provide a filename for the schema repository. ClearQuest then creates and initializes the appropriate Access databases in this directory.

Now that you have set up the Access databases, proceed to “Installing ClearQuest for an administrator” on page 37.

Setting up SQL Anywhere

To create an SQL Anywhere database server, complete the following tasks:

- Install the Sybase SQL Anywhere Server software. (**Note:** SQL Anywhere is available on the ClearQuest CD and can be installed using the Rational Software Setup wizard).
- Choose or create a user account to run the SQL Anywhere database server and set user privileges for that account.
See Defining user privileges below.
- Create an SQL Anywhere database server. See “Creating an SQL Anywhere database server” on page 16.

Defining user privileges

To define privileges for a user account running an SQL Anywhere database server:

- 1 Make sure you have installed the Sybase SQL Anywhere Server software.
 - 2 Do one of the following:
 - If your Windows NT computer is running Windows NT Workstation software, click **Start > Programs > Administrative Tools (Common) > User Manager**.
 - If your Windows NT computer is running Windows NT Server software:
 - Click **Start > Programs > Administrative Tools (Common) > User Manager for Domains**.
 - Click **User > Select Domain** and type the local machine name in the Domain box, and then click **OK**.
- Note:** If the user does not already exist, create the user (**User > New User**).
- 3 Click **Policies > User Rights** to open the User Rights Policy dialog box.
 - 4 Select **Show Advanced User Rights**.
 - 5 In the **Right** list box of the User Rights Policy dialog box, select **Access this computer from network**.

- 6 Click **Add**.
- 7 For **List Names From**, select the domain of the account running the SQL Anywhere database server.
- 8 Click **Show Users**.
- 9 In the **Names** list, select the account running the SQL Anywhere database server.
- 10 Click **Add**, and then click **OK**.
- 11 In the **Right** list box of the User Rights Policy dialog box, select **Log on as a service**.
- 12 Repeat Steps 6 through 10.
- 13 In the **Right** list box of the User Rights Policy dialog box, select **Log on locally**.
- 14 Repeat Steps 6 through 10.
- 15 Click **OK**.
- 16 Click **User > Exit**.

Creating an SQL Anywhere database server

An SQL Anywhere database server is a process that runs on the database server machine. Its function is to coordinate all activity against your SQL Anywhere databases. You create one SQL Anywhere server to provide access to all of your database files.

Follow these steps to use the Rational Administrator to create a new server:

- 1 From the Start menu, click **Sybase SQL Anywhere Database Server > Rational Administrator**.
- 2 Click **File > New SQL Anywhere Database Server**.
- 3 Type a unique alphanumeric string of up to 30 characters that identifies this database server on the network, and then click **Next**.

Important: Do not use spaces or special characters in the server name (underscores are acceptable).

- 4 Type the amount of space to use for caching data for the SQL Anywhere database server, and then click **Next**. Allow 2048 KB for each Rational repository on the server.
- 5 Select one or more protocols to communicate with the SQL Anywhere database server, and then click **Next**.

Note: To reduce connection time, select only those protocols that are actually used on your network.

- 6 Select the Startup options, as described in the following steps.
 - a Select one of the following Windows NT Service Startup options. These options start the SQL Anywhere database server when you power on your system:
 - Click **Automatic** to automatically start the SQL Anywhere database server when you start your system.
 - Click **Manual** if you do not want the SQL Anywhere database server to automatically start when you start your system. If you select this option you will have to manually start the database server after each time you reboot the server machine.

- b Select or clear **Start service immediately**. This option starts the SQL Anywhere database server immediately after you create it. If the box is cleared, you will need to start the server manually after creating it.

7 In the Account section, do the following.

- a Click **Other Account** to allow users to access a shared ClearQuest database or shared repository. This option gives users the most flexibility for accessing a database or repository.

Note: Do not use **System Account (LocalSystem)** to run the service under a local account. Doing so prevents you from remotely configuring a ClearQuest database using UNC.

- b Type a domain and user account name for the Other Account. This is the account you created and configured under “Defining user privileges” on page 14. The name is case-sensitive.

Enter the user account information as follows:

- If you created a local machine account in Step 2 on page 14, enter the domain and account name as:

.\userid

- If you created a domain account, enter the domain and account name as:

domain\userid

- c Type the password for the Other Account. The password is case-sensitive.

8 Click **Next**.

The Rational Administrator displays a summary of your choices.

9 Click **Finish**.

10 After installing the SQL Anywhere software, create one shared directory on the machine for the directory that contains your SQL Anywhere databases. (To increase performance, keep your databases on the same machine as the database server.)

11 Make a note of the UNC path of the share directory. The path should be of the form:

\\<machine_name>\<share_name>\<database_directory>

For example:

```
\\developmentserver\project34share\clearquestdbs
```

Now that you have set up your SQL Anywhere databases, proceed to “Installing ClearQuest for an administrator” on page 37.

Setting up Microsoft SQL Server Version 6.5

Install SQL Server 6.5 with SQL Server Service Pack 5a, if you have not already installed it.

Note: When you install SQL Server, select one of the following sort-order options:

- Dictionary order, case-sensitive
- Dictionary order, case-insensitive

If you change sort orders after installing SQL Server, you must rebuild the SQL databases and reload the data.

Note: This will affect case-sensitivity of ClearQuest queries. If you want ClearQuest queries to be case-insensitive, set the order here.

Registering your SQL Server machine for SQL Server 6.5

Start SQL Server Enterprise Manager. If the SQL Server machine is not already registered, register it now.

1 Click **Server > Register Server**.

2 Type the server name.

Note: Make a note of the server name because you will need it during the ClearQuest installation.

3 Click **Use Standard Security**.

4 For **Login ID**, type SA, which is the System Administrator .

5 For **Password**, type your SA password.

6 Click **Register**.

The server should now appear in the list of servers.

7 Set up the SQL Server databases as described in the next section.

Setting up SQL Server 6.5 databases

You must set up one empty SQL Server 6.5 database for the ClearQuest schema repository, and one empty SQL Server 6.5 database for each ClearQuest Client user database (such as the optional `SAMPL` database). For each SQL Server 6.5 database, complete the following tasks:

- Create an empty database
- Create login accounts for the database
- Set up a backup procedure for the database

To add more databases to ClearQuest, repeat the preceding tasks for each new database.

Note: These instructions assume that you have a simple SQL Server configuration. If you have large databases or many users, consider setting up separate log devices or spreading data across multiple devices. For details, see your SQL Server documentation.

Creating empty databases

Use the SQL Server Enterprise Manager to create an empty SQL Server 6.5 database for the ClearQuest schema repository and for each ClearQuest client user database (such as the `SAMPL` database).

Note: Your SQL Server databases must be in the same network domain as your ClearQuest Web server and any ClearQuest clients or tools that need to connect to the database. If it is not in the same domain, you will get an error. See the ClearQuest release notes for more details. Consult the Microsoft KnowledgeBase Article Q152828, <http://premium.microsoft.com/support/kb/articles/q152/8/28.asp>.

For each SQL Server 6.5 database, do the following.

- 1 Create the data device.
 - a Select your SQL Server machine. If your machine does not appear in the list of servers, you need to register it. See “Registering your SQL Server machine for SQL Server 6.5” on page 19.
 - b Click **Manage > Database Devices**.

- c Click the **New Device** icon.
 - d Type a name for the device, select a location, and type a size.
For the schema repository, allocate at least 50 MB. The device must be large enough to hold all the schema versions. You can adjust this size later, if necessary.
For the user database, allocate at least 15 MB for every 1,000 records you expect to generate. The exact amount of space required depends on the complexity of your schema.
 - e Click **Create Now**.
The new device should now appear in the list of devices.
 - f Close the Manage Database Devices window.
- 2 Create the database.
- a Click **Manage > Databases**.
 - b Click the **New Database** icon.
 - c Type a name for the database.
 - d For **Data Device**, select the device you just created.
 - e Leave **Log Devices** as none.
 - f Click **Create Now**.
The new database should now appear in the list of databases.
- 3 Configure the database:
- a In the Manage Database window, double-click the database you just created. The Edit Database dialog box appears.
 - b Click the **Options** tab.
 - c Click **Select Into/Bulk Copy** and **Truncate Log on Checkpoint**.
 - d Click **OK**.
 - e Close the Manage Databases window.

Creating login accounts for each database

Use the SQL Server 6.5 Enterprise Manager to create login accounts for ClearQuest. ClearQuest uses these accounts to log into the SQL Server database program on behalf of ClearQuest users. These login accounts are separate from ClearQuest user logins and are hidden after the installation.

Note: When you create the ClearQuest schema repository, the ClearQuest Maintenance tool prompts you for the three logins listed below. If you do not want to create three separate login accounts, you can use the DBO login ID for all three.

Create the following login accounts for each database using SQL Server authentication:

- A database owner (DBO) login account
- A general purpose login account
- Another general purpose login account to be used by the schema repository. This third account will be used as a read-only account by ClearQuest.

Note: You will need to set up SQL Server to operate in Mixed Mode (Windows NT Authentication and SQL Server Authentication). This property can be set via Enterprise Manager, right-click on the server and select Properties menu, Security tab.

Follow these steps to create the login accounts:

- 1** Click **Manage > Logins**.
- 2** Type a unique login name and password.
Note: Remember the names and passwords of each login account; you will need them during the ClearQuest installation.
- 3** In the **Permit** column, click the database for which you are creating the login. A check mark should appear in the Permit column.
- 4** If you are creating the database owner login, click the **Alias** column and select **DBO**.
- 5** Click **Add** and confirm the password.

- 6 Repeat steps 2 through 5 for the other accounts.
- 7 Close the **Manage Logins** window.

Setting up database backup procedures

The backup procedure described here provides a daily backup for the ClearQuest databases by overwriting the backup device each day. It assumes that your site also periodically backs up the backup device to recoverable media.

Use the SQL Server Enterprise Manager to set up backup schedules for the schema repository and for the databases.

- 1 Click **Tools > Database Backup/Restore**.
- 2 On the Database Backup/Restore dialog box, click the **Backup** tab.
- 3 From the Database Backup list, select the database you want to back up.
- 4 From the Backup Devices list, select **New**.
- 5 Type a name and select a location. We recommend that you put the backup device on a different disk than the database devices, and that this daily backup be backed up to tape by your site's normal backup procedures.
- 6 Select **Disk Backup Device**.
- 7 Select **Create**.
- 8 Click **Schedule**.
- 9 In the Backup Volume Labels dialog box, leave **Volume level** blank.
- 10 In the Schedule Backup dialog box, select **Recurring**.
- 11 Click **Change**.
- 12 For **Daily Frequency**, select **12 a.m.** or another time of your choice.
- 13 Click **OK** to close the open dialog boxes.
- 14 Click **Close** to close the Database Backup/Restore dialog box.

Now that you have set up your SQL Server databases, proceed to “Installing ClearQuest for an administrator” on page 37.

Setting up Microsoft SQL Server 7 and 2000

You need to set up one empty SQL Server database for the ClearQuest schema repository, and one empty SQL Server database for each ClearQuest Client user database (such as the optional `SAMPLE` database). For each SQL Server database, complete the following tasks.

- (Verify) server registration
- Create an empty database
- Set up a backup procedure for the database
- Create a SQL Server login with the `db_owner` role to use for the ClearQuest database logins (the same login is used by ClearQuest for all connections).

Note: Do not use the `SA` (system administrator) login. During an upgrade or move process, ClearQuest requires empty databases. However, if the `SA` login is used, ClearQuest is able to see the System Tables, assumes the database is not empty, and does not allow the upgrade/move process to continue.

For SQL Server 2000 users: When installing SQL Server 2000, it is important to select the default registration name for your database server. This will make the registration name the same as your server's machine name.

If you want to add more user databases to ClearQuest, repeat the preceding tasks for each new database.

Registering your SQL Server machine for SQL Server

- 1 In the **SQL Server Enterprise Manager**, select your Windows NT server in the **SQL Server Group**.

If your server is not shown, register it now by going to Step 2. If your server is already registered, go to “Creating a new SQL Server 7 database” on page 25.

- 2 Right-click on the SQL Server Group and select **New SQL Server Registration**. The Register SQL Server Wizard displays.
- 3 Select a server name, and click **Next**.

Note: Make a note of the server name because you will need it during the ClearQuest installation.

- 4 For Authentication Mode, select **SQL Server**, then click **Next**.
- 5 For **Login ID**, type **sa**, and for **Password**, type your **sa** password. Then click **Next**. (The SA user has the privilege to create logins and databases.)
- 6 Add this server to an existing group, or create a new group. Then click **Next**.
- 7 Click **Finish**. The server will appear in the list of servers.

Creating a new SQL Server 7 database

- 1 From the Getting Started Taskpad, select **Administer SQL Server > Create a database**.
- 2 In the wizard, specify a file system location for the database and the log. You can accept the defaults for the growth rate of the database and the log.

If you want to give the databases larger initial values, allocate at least 50 MB for the schema repository and at least 15 MB for every 1,000 records expected for your user databases.
- 3 After you create a database, you are prompted to create a Database Maintenance Plan. The Database Maintenance Plan Wizard allows you to set up a database backup routine. It is strongly recommended that you set up automated nightly backups for all your ClearQuest databases.
- 4 Set database properties for the new database:
 - a Select the new database from the server's **databases** folder.
 - b Right-click on the database and select **Properties**.
 - c On the **Options** tab, select these Settings:
 - Select into / bulk copy
 - Truncate log on checkpoint
 - d Click **OK**.

Creating SQL Server logins

Create a **db_owner** login for each ClearQuest database (schema repository and each user database) by selecting the db_owner role for each of the logins you create.

Note: Do not use the SA (system administrator) as the owner login of a ClearQuest database. During an upgrade or move process, ClearQuest requires empty databases. However, if the SA login is used, ClearQuest is able to see the System Tables, assumes the database is not empty, and does not allow the upgrade/move process to continue.

- 1 Expand the **Security** folder, then right-click **Logins**, and click **New Login**. The SQL Server Login Properties - New Login dialog box displays.
- 2 On the **General** tab, select **SQL Server authentication mode** because ClearQuest does not support Windows authentication.

Note: Because ClearQuest requires a SQL Server login for each database and does not support Windows NT Authentication, you will need to set up SQL Server to operate in Mixed Mode (Windows NT Authentication and SQL Server Authentication). This property can be set via Enterprise Manager, right-click on the server and select Properties menu, Security tab.

- 3 Enter a name and password.
- 4 In the Defaults area, select your database and leave the Language set to <default>.
- 5 On the **Server Roles** tab, do not grant *any* server roles.
- 6 Click **OK** and verify your password.
- 7 Grant db_owner privileges to the login in the new database.
 - a On the **Database Access** tab, select from the **Permit** list the new database to grant the login permission.
 - b Under **Permit in database role**, check db_owner and public. Do not grant this user any other privileges.

Migrating from SQL Server 6.5

Use the ClearQuest Maintenance Tool to migrate your schema repository to a SQL Server 7 database. Then use ClearQuest Designer to move previous SQL Server 6.5 user databases to SQL Server 7. You do this by using the Properties dialog box to change the properties of the user database.

Warning: When migrating from SQL Server 6.5 to SQL Server 7, do **not** use the SQL Server 7 Upgrade Wizard to upgrade your schema repository and user databases. You need to use the ClearQuest Maintenance Tool and ClearQuest Designer.

Ensuring SQL Server 7 Client Connectivity

SQL Server 7 client machines require SQL Server ODBC driver number 3.7x. To update the ODBC driver for a client machine:

- 1 Go to that machine, insert the SQL Server 7 CD-ROM, and run
`D:\x86\other\mdac_type.exe`
where *D*: is the letter of your CD-ROM drive.
- 2 Choose the **Custom** install option when prompted.
- 3 Select **ODBC Driver for Microsoft SQL Server** (and unselect other options such as Microsoft JetEngine).

Now that you have set up your SQL Server databases, proceed to “Installing ClearQuest for an administrator” on page 37.

Setting up the Oracle Server

If you are using ClearQuest with Oracle databases, install and create the databases according to Oracle's documentation. Follow these guidelines when you set up your Oracle databases:

- Create a specific Oracle database instance, or identify an existing Oracle instance, to use for ClearQuest data.
- Create two or more separate Oracle database users (each with its login):
 - the ClearQuest schema repository user login
 - one user login for each ClearQuest user database
- Grant each user login the Connect and Resource roles only.
- We recommend that you associate each Oracle database user with a unique default tablespace that is separate from all other users.

Note: The Oracle database users can share the **temporary** tablespace(s), but the temporary tablespace(s) for these users must be separate from the Oracle system tablespace.

Note: If your ClearQuest installation will include ClearQuest Unix clients, your vendor database must be Oracle and it must be installed on a Unix server.

Configuring an Oracle client installation for ClearQuest Windows

The ClearQuest administrator and all ClearQuest Windows end-users must install Oracle Client Software on their local machines before they can install and use ClearQuest. To install Oracle Client Software, follow the Oracle Networking Products documentation.

Before using ClearQuest Windows, all users must use the **SQL*Net Easy Configuration** or **SQL8*Net Easy Configuration** program to configure their computers to access Oracle databases.

IMPORTANT: Even if you will only be using ClearQuest Unix clients, you need to use the SQL*Net Easy Configuration tool to configure the administrator's NT workstation to access the Oracle database. ClearQuest Unix requires that the administrator machine be a Windows machine.

- 1 From the Start menu, click **Oracle for Windows NT > SQL*Net Easy Configuration** if using Oracle 7.x or click **Oracle for Windows NT > SQL8*Net Easy Configuration** if using Oracle 8.x and complete these steps:
- 2 Select **View Configuration Information** to see if your Oracle database administrator configured a Database Alias for you. If not, go to the next step.
- 3 Add a new database alias by selecting **Add Database Alias**. Click **OK**.
- 4 Type a SQL*Net Database Alias (database name your Oracle database administrator set up previously). Make a note of the Database Alias because you will need it during the ClearQuest database setup. Click **OK**.

Note: All ClearQuest users must use the same Database Alias.

- 5 Select **TCP/IP** as the network protocol to use to communicate with the database. Click **OK**.
- 6 Type the Host Name (the name of database server machine) and the Database Instance (the system ID or SID). Get this information from your Oracle database administrator.

Note: All ClearQuest users must use the same Database Alias, Database Instance (system ID or SID), TCP/IP protocol, and Host Name (Oracle server machine).

- 7 When you click **OK**, the SQLNet Easy (or SQLNet8 Easy) Configuration program asks you to confirm your choices. Click **Yes** to confirm the current configuration information.
- 8 After configuring your database, the installer displays the initial opening screen so that you can configure additional aliases. To quit the program, click **Cancel**.

Enhancing search capabilities

With a standard Oracle installation, you cannot perform a string search on multi-line text fields. For example, in ClearQuest you cannot search for text in a multi-line Notes field.

Oracle does provide an option called the ConText Option (Oracle 7), ConText Cartridge (Oracle 8) or IntermediaText (Oracle 8.1.x) that enables string searches in multi-line text fields. When installed, multi-line text fields become available for queries in ClearQuest.

For Oracle 7.x and Oracle 8.0.x

To enable Oracle multi-line text search with ClearQuest, do the following.

- 1 Install the ConText Option/Context Cartridge according to the Oracle documentation.
- 2 Start at least two ConText servers. Be sure to use the QDM (Query, DDL, DML) personality options.
- 3 To set up the ClearQuest Oracle user to have the necessary privileges, run the following SQL script using Oracle's SQLPlus utility as the Oracle system user.

The SQL script (`setup_cq_ora_user.sql`) can be found in the ClearQuest installation directory (`\\Rational Software\ClearQuest\`).

```
sqlplus ctxsys/<password>@<tnsname>  
@setup_cq_ora_user.sql <cquser>
```

where `<cquser>` is the name of the Oracle login used for creating the ClearQuest database.

For Oracle 8.1.x

- 1 Install InterMedia Text according to the Oracle documentation. Generally, this is installed by default when the Oracle server is installed.
- 2 Start at least two ConText servers.
- 3 To set up the ClearQuest Oracle user to have the necessary privileges, run the following SQL script using Oracle's SQLPlus utility as the Oracle system user.

The SQL script (`setup_cq_orabi_ctx.sql`) can be found in the ClearQuest installation directory (`\\RationalSoftware\ClearQuest\`).

```
sqlplus system/<password@tnsname>  
@setup_cq_orabi_ctx.sql <cquser>
```

where `<cquser>` is the name of the Oracle login used for creating the ClearQuest database.

For ClearQuest Unix clients

If your ClearQuest installation will include ClearQuest Unix clients, your vendor database must be Oracle and it must be installed on a Unix server.

In addition, after setting up your Oracle database server, you must also install OpenLink Request Broker to facilitate Oracle connections. See “Setting up the Oracle OpenLink Request Broker” on page 31.

Setting up the Oracle OpenLink Request Broker

If you will be supporting ClearQuest Unix clients, you need to install and start the OpenLink Request Broker.

- 1 Log into the Oracle server as the same user ID you will use when installing ClearQuest.
- 2 Change to the `openlink_server` directory in the Rational root directory that was created when you installed the ClearQuest components.

```
cd [Rational_dir]/ClearQuestOracleSupport/openlink_server/[arch]
```

- 3 Run `install.sh` and follow the prompts for the OpenLink Configuration utility, accepting defaults when available.
- 4 In the second phase of the installation, select 1) Request Broker and enter the requested information.
- 5 Next, select 9) for Oracle 7 or 10) for Oracle 8 and enter the path name of the Oracle home directory and the SID to be used.
- 6 Next, select S) Startup Request Broker.
- 7 Quit the OpenLink Configuration Utility.

Installing the OpenLink ODBC catalog views for Oracle 7 or Oracle 8

This task is done while connected to the internal database. Run the Oracle `svrmgrl` with the corresponding sql script, and use `odbccat7.sql` for Oracle 7 or `odbccat8.sql` for Oracle 8. The script(s) are located in the newly created bin directory.

- 1 Log in as the Oracle database administrator.
- 2 Change to the directory containing the `odbccat7.sql` or `odbccat8.sql` script:

```
cd [Rational_dir]/ClearQuestOracleSupport/openlink_server/[arch]/bin
```

- 3 Enter the following:

```
$ svrmgrl lmode=y
SVRMGR>CONNECT internal;
SVRMGR>@odbccat7.sql
--or--
SVRMGR>@odbccat8.sql
SVRMGR>EXIT;
```

For more information, see the comments in the `odbccat*.sql` file.

Automatically restarting the OpenLink broker on reboot

The following instructions assume your Unix installation uses the typical directories for startup and shutdown scripts.

To automatically restart the OpenLink Request Broker after rebooting the server:

- 1 Log in as root (root privileges are typically required for this step).
- 2 After installing the cd-image, there will be an rc.OpenLinkBroker file in:

```
[Rational_dir]/ClearQuestOracleSupport/openlink_server/[arch]
```

where [arch] is either hp10_pa or sun5.

For Solaris,

- 1 Copy the rc.OpenLinkBroker script to the /etc/init.d directory.
- 2 Edit the /etc/init.d/openlinkbroker script to change the value of BIN_DIR to be:

```
[Rational_dir]/ClearQuestOracleSupport/openlink_server/sun_5/bin
```

- 3 Make the script executable:

```
chmod +x /etc/init.d/openlinkbroker
```

- 4 Make symbolic links for startup and shutdown as follows. Note that the example uses "98" for startup and "02" for shutdown. You may need to use different numbers so that the startup script is invoked after any Oracle and NFS start up scripts.

```
ln -s /etc/init.d/openlinkbroker /etc/rc2.d/S98openlinkbroker  
ln -s /etc/init.d/openlinkbroker /etc/rc2.d/K02openlinkbroker
```

For HP-UX,

- 1 Copy the rc.OpenLinkBroker script to the /etc/init.d/ directory.

```
cp rc.OpenLinkBroker /sbin/init.d/openlinkbroker
```

- 2 Edit the /sbin/init.d/openlinkbroker script to change the value of BIN_DIR to be:

```
[Rational_dir]/ClearQuestOracleSupport/openlink_server/hp10_pa/bin
```

- 3 Make the script executable:

```
chmod +x /sbin/init.d/openlinkbroker
```

- 4 Make symbolic links for startup and shutdown as follows. Note that the example uses "98" for startup and "02" for shutdown. You may need to use different numbers so that the startup script is invoked after any Oracle and NFS start up scripts.

```
ln -s /sbin/init.d/openlinkbroker /sbin/rc2.d/S98openlinkbroker  
ln -s /sbin/init.d/openlinkbroker /sbin/rc2.d/K02openlinkbroker
```

Now that you have set up your Oracle databases, proceed to “Installing ClearQuest for an administrator” on page 37.

Setting up IBM DB2 6.1

To use ClearQuest with IBM DB2 databases, you need to install IBM DB2 6.1 on the machine which you will use as your database server.

IMPORTANT: Please see the ClearQuest release notes before proceeding for more information about using DB2 databases with ClearQuest (`\\ClearQuest\books\clearquest_readme.htm`).

Creating a new DB2 database

You need to set up one empty DB2 database for the ClearQuest schema repository, and one empty DB2 database for each ClearQuest user database (such as the optional `SAMPL` database). For each DB2 database, complete the following tasks.

- 1 From the Start menu, click **DB2 for Windows NT > Control Center**.
- 2 Enter the login name and password for the DB2 administrator account and click **OK**.
- 1 From the DB2 Control Center, expand the machine name that corresponds to the database server on which you will create the database until you see the **Databases** folder.
- 2 Right-click the **Databases** folder and choose **Create > Database using Smart Guide**.
Note: Make sure all DB2 services are running, otherwise this utility will not work.
- 3 Enter a name of the database. Note the DB2 supports database names will eight characters or less.
- 4 Click **Done**.

Creating a DB2 alias on client machine

All ClearQuest Windows client users (including the ClearQuest administrator) must install DB2 client software on their local machines before they can install and use ClearQuest. To install DB2 client software, follow the IBM documentation.

Note: If the client and server machines are the same, you can skip this step.

Before using ClearQuest Windows client, all users must use the **Client Configuration Assistant** to create a DB2 alias for each ClearQuest schema repository and user database they will use.

- 1 Install DB2 Client Software according to the IBM DB2 documentation.
- 2 From the Start menu, choose DB2 for **Windows NT > Client Configuration Assistant**. The Welcome dialog box appears.
- 3 Click **Add database**.
- 4 Click **Search the network**.
- 5 Click **Next**.
- 6 Expand the **Known Systems** folder, if you see the database server machine on which the ClearQuest database resides, expand it and select the database name for which you want to create an alias.

Note: If you don't see the machine you need, try expanding the **Other Systems** folder. If you don't see the machine you need in the Other Systems folder, talk to your database administrator. There may be a network problem.
- 7 Expand the database server machine folder you need and click the database for which you need to create an alias.
- 8 Click **Next**.
- 9 Click **Done**.

Now that you have set up your DB2 databases, proceed to “Installing ClearQuest for an administrator” on page 37.

3

Installing ClearQuest for an administrator

Before installing ClearQuest on client machines you must install it on the administrator's machine, set up licensing, and set up your schema repository and user databases.

If you are using an Oracle or DB2 database, install the Oracle or DB2 client software **before** installing ClearQuest. See “Setting up the Oracle Server” on page 28 or see “Setting up IBM DB2 6.1” on page 35 for more information.

This chapter covers the following topics:

- “Installing ClearQuest for an administrator” on page 38
- “Creating ClearQuest databases” on page 39
- “Setting up configuration management integrations” on page 44
- “Setting up record submission via e-mail” on page 48
- “Installing Crystal Reports” on page 49

Installing ClearQuest for an administrator

To install ClearQuest for administrators:

- 1 Load the ClearQuest CD-ROM.
- 2 If the setup program does not run automatically, navigate to the top level directory of the CD-ROM and double-click **setup.exe**.

The Rational Software Setup wizard prompts you through the ClearQuest installation.

- 3 If you are evaluating ClearQuest, choose the **Evaluator** installation. Otherwise, choose the **Administrator** installation.
- 4 Launch the License Administrator to enter your ClearQuest licenses. Follow the instructions on your License Certificate and in the online Help for the License Key Administrator.

Note: Rational ClearQuest uses a FlexLM license server. If you don't already have a FlexLM license server installed, it is available on the Rational Solutions for Windows CD. For more information, see *Administering Licenses for Rational Suite*, available on the Rational Solutions for Windows Online Documentation CD.

Creating ClearQuest databases

After you install ClearQuest and have created the necessary empty vendor databases (see “Configuring vendor databases” on page 11), you must create the ClearQuest databases (schema repository and user databases). Initially you can create a sample user database to use while you familiarize yourself with the product. You can create your production user databases later.

If you chose the Evaluator installation, Microsoft Access databases are created for you automatically. If you chose the Administrator installation, follow these steps to create ClearQuest databases:

Creating a schema repository

- 1 Launch the ClearQuest Maintenance Tool (**Start > Programs > Rational ClearQuest > ClearQuest Maintenance Tool**).

Note: The first time you launch ClearQuest, the Maintenance Tool runs automatically.

- 2 Select **Create a new schema repository** and click **Next**.
- 3 Select the vendor database you plan to use, enter the properties appropriate for that vendor, then click **Next**. Save this information for clients to use when they connect to the databases. The information to enter is as follows:

- **MS_ACCESS**

- Enter a name for the schema repository. Enter the entire path to the file using a UNC style path. For example:

```
\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb
```

You can browse to the directory where you want to create the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- **SQL_ANYWHERE**

- Enter a name for the schema repository. Enter the entire path to the file using a UNC style path. For example:

```
\\DevServer\ProjectShare\CQ_DBS\schema_repo.db
```

You can browse to the directory where you want to create the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- Enter the name of the database server.
- Enter the protocols used to communicate with the SQL Anywhere server.
- Enter the database host name. The database host machine must be visible to the client machines via network share and via one or more of the communication protocols. For TCP/IP, this can also be the IP address.

- **SQL_SERVER**

- Enter an SQL Server database name for the database that will contain the schema repository.
- Enter the name of the database server.
- Enter the database owner (DBO or Administrator) login.
- Enter the password for the database owner (DBO or Administrator) login.
- Enter the general purpose or read/write login.
- Enter the password for the general purpose or read/write user login.
- Enter the schema repository or read-only user login.
- Enter the password for the schema repository or read-only login.

▪ **ORACLE**

- Enter the TNS name (SQL*Net Alias pointing to the Oracle instance).
- Enter the Oracle login you created for the schema repository.
- Enter the password for the login.
- The following options need to be entered in the **Connect Options** field, delimited by semi-colons. For example,

```
Host=<name>;SID=<name>;Server_ver=8.0;Client_ver=7;Lob_type=LONG
```

Option	Definition
Host	The name of the database server machine. If your ClearQuest deployment will include both Unix and Windows clients the Host name is mandatory.
SID	The name of the Database Instance. If your ClearQuest deployment will include both Unix and Windows clients the SID name is mandatory.
Server_ver	Provide the version of the Oracle server you are using. Possible values are 7, 8.0, and 8.1 (For Oracle 8i, use 8.1.)
Client_ver	Provide the version of the Oracle client software you are using. Possible values are 7, 8.0, and 8.1 (For Oracle 8i, use 8.1.) If ClearQuest client users want to use a different Oracle client version than what is entered here by the administrator, they'll need to override the set options manually. The default setting is 7. See Release Notes for details.
Lob_type	Set the type of data you'll be using. The valid data type is LONG.

Note: All ClearQuest users must use the same SQL*Net Alias (TNSname), Database Instance (system ID or SID), TCP/IP protocol, and Host Name (Oracle server machine).

- 4 We recommend that you create a sample database using one of the provided schemas. Select a schema, give the sample database a name, then click **Next**.

- 5 If you created a sample database, you must select a vendor and enter the database properties. When you are finished, click **Next**.
- 6 You can save these settings as a default profile, or click **Finish** to complete the setup. The profile records the entries you made and saves them to a file (the default name is `cgprofile.ini`). Clients can connect to the database by using the profile file instead by typing the connection information.

Creating a user database

You create ClearQuest user databases with the ClearQuest Designer, after you have successfully created a schema repository.

Note: Unless you are using MS Access, you must have first created empty vendor databases before you can create ClearQuest databases.

- 1 From the Start menu, choose **Programs > Rational ClearQuest > ClearQuest Designer**.
- 2 Click **Next** when the Rational Schema Repository dialog box appears.
- 3 Click **OK** when the ClearQuest Designer Login dialog box appears.

Note: When you click OK, you will be logging in with the default ClearQuest administrator login name and password. The default user name is “admin” the password is null and should be left blank. You should change this password and create a new login as your earliest convenience.
- 4 Click **Cancel** when the Open Schema dialog box appears.
- 5 Choose **Database > New Database**.
- 6 Enter a logical name for the database you want to create. This name must be five characters or less.
- 7 Click **Next**.
- 8 Select the vendor database you plan to use, enter the properties appropriate for that vendor, then click **Next**. For more information about the required parameters for vendor databases, see step 3 under “Creating a schema repository” on page 39.
- 9 Click **Next**.

- 10 Click **Next** to accept the default polling parameters.
- 11 Choose a schema with which to associate your database. You must associate the database with a schema.

Warning: If you have Rational ClearQuest/TeamTest edition, you must select the TestStudio schema. The Rational ClearQuest/TeamTest edition license does not allow you to use other schemas. You will get a licensing error if you do not choose the TestStudio schema.
- 12 Click **Finish**.

Setting up configuration management integrations

You can integrate ClearQuest with software configuration management tools to create a complete change management system. ClearQuest relates change requests directly to changes in your evolving code base, allowing you to answer such questions as:

- Which defects have been fixed in one release but not in another?
- Which defects can be attributed to a specific release?

Integrating with Rational ClearCase

The integration of ClearQuest and ClearCase allows you to associate change requests with one or more ClearCase elements. To set up the integration:

- 1 Within ClearCase, use the ClearQuest Integration Configuration tool located on the ClearCase Administration menu. The online Help describes how to set up and use the integration.
- 2 Within ClearQuest, apply the ClearCase package to a schema to enable the integration. For more information on installing packages, see the *Administering Rational ClearQuest* guide.

Note: If you have a previous installation of ClearQuest that used the ClearCase add-in, select the **Upgrade 1.0** version of the ClearCase package. If this is the first time you are installing the integration, use the **1.0** version of the package.

Unified Change Management (UCM)

To use the ClearQuest/ClearCase UCM integration, consult the following documentation:

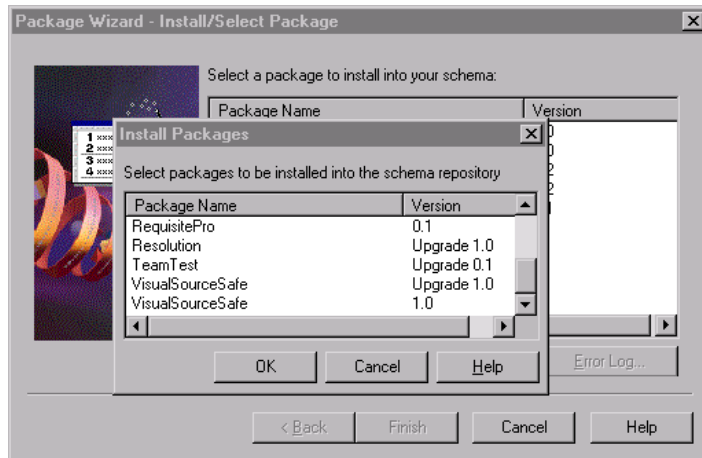
- To set up the ClearCase part of the integration and to learn about the UCM process, see the *Managing Software Projects with ClearCase* guide provided with ClearCase.
- To set up the ClearQuest part of the integration, see Appendix B, “Enabling ClearQuest for Unified Change Management,” in the *Administering Rational ClearQuest* guide.

Integrating with Microsoft Visual SourceSafe

The ClearQuest/Visual SourceSafe integration adds Visual SourceSafe fields to a record type you choose, and the Visual SourceSafe tab to the record type form.

To enable the integration:

- 1 Install ClearQuest and Visual Studio according to the normal procedure for each product.
- 2 Set up your ClearQuest schema repository and user databases.
- 3 Use the ClearQuest Designer to add the Visual SourceSafe integration package to your schema using the Package Wizard.
 - a Launch the ClearQuest Designer from the Start menu
 - b Check out the schema you want to use with the integration.
 - c Install the Visual SourceSafe package by choosing **Package > Package Wizard**. Click **More Packages** to locate the VisualSourceSafe package, then click **OK**.



d Select the Visual SourceSafe package and click **Next**.

Note: If you have a previous installation of ClearQuest that used the Visual SourceSafe add-in, select the **Upgrade 1.0** version of the package. If this is the first time you are installing the integration, use the **1.0** version.

e Select the record types to be enabled by the package, then click **Finish**.

For more information on packages, consult the *Administering Rational ClearQuest* guide or the Help for the ClearQuest Designer.

4 Check in the schema.

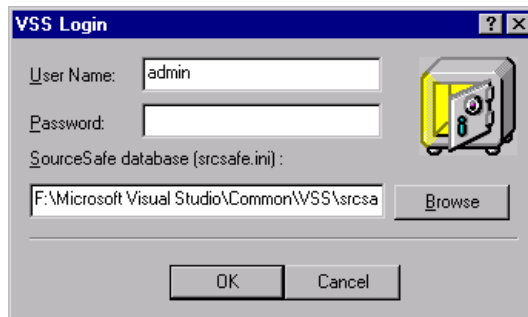
5 Upgrade your user database to the new version of the schema.

Important: We recommend that you first upgrade a test database and familiarize yourself with the integration features before upgrading your production database.

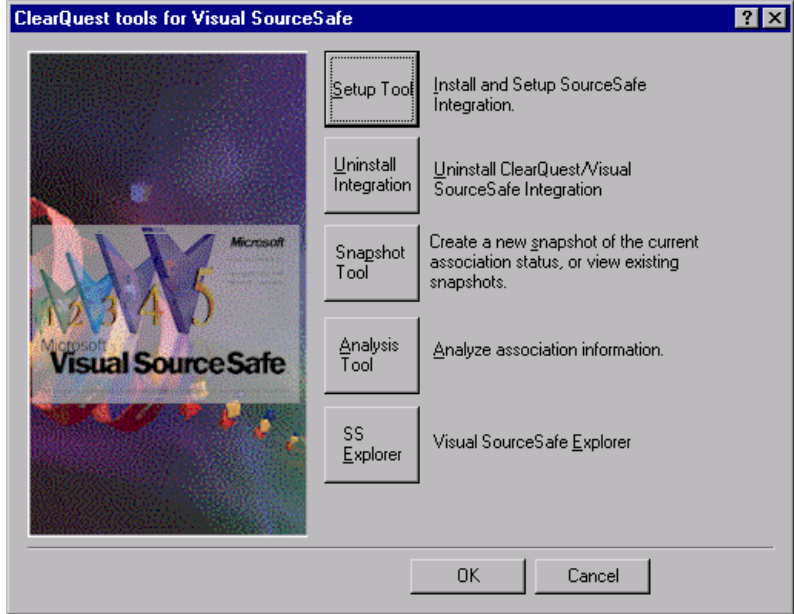
6 In ClearQuest, create a query that your end users can use to find the records you want to associate to projects in Visual SourceSafe.

7 On each client that wants to use the integration, launch the ClearQuest Visual Source Safe tool (cqvs.exe) located in the ClearQuest home directory. You can drag a copy of cqvs.exe to the desktop to create a shortcut to it.

8 Log in and select the Visual SourceSafe database you want to use.



9 From the ClearQuest tools for Visual SourceSafe screen, select **Setup Tool**.



- 10 In the Visual SourceSafe Integration dialog, select the ClearQuest query you want to use and click **OK**.

The installation of the integration is complete. To begin using the integration, see the Help for the ClearQuest Visual SourceSafe tool.

Setting up record submission via e-mail

To enable your users to submit and modify records via e-mail, you configure the Rational E-mail Reader. The E-mail Reader is an e-mail processing tool that parses submitter's e-mail and commits new records or changes to the database. The E-mail Reader requires a dedicated e-mail account to be assigned for parsing records.

Use the Rational E-mail Reader to designate one machine to be the Rational Mail Server. We recommend that the Rational Mail Server run on a machine that is always available.

The E-mail Reader (mailreader.exe) is automatically installed in the `\Rational\common` directory. You can drag a copy of the mailreader.exe to the desktop to create a shortcut to it. You can then follow the instructions in the online Help (located in `\Rational\common\mailreader.hlp`) on how to set up the E-mail Reader. For more information on the E-mail Reader see "Administering ClearQuest E-mail" in the *Administering Rational ClearQuest Guide*.

Installing Crystal Reports

If you want to customize the defect reports that ship with ClearQuest, you must install Crystal Reports Pro 6.0. This software comes on a separate CD in your Rational ClearQuest software kit.

To install Crystal Reports, use the Crystal Reports installation directions that come with the CD.

Note: Users who will not be editing existing or creating new report formats, do not need to install Crystal Reports.

You have completed Step 2 of the steps described in “Understanding the install process” on page 9. Return to that page to determine the next step.

4

Installing ClearQuest Windows for end-users

ClearQuest Windows must be installed on each end-user machine. When ClearQuest Windows is installed and connected to the database, users can enter and modify records.

Note: It is also possible to allow users to install the ClearQuest Windows client from a network location, for more information see “Silent Installation of Rational ClearQuest” on page 113.

To install ClearQuest Windows for end-users:

- 1 Load the ClearQuest CD-ROM.
- 2 If the setup program does not run automatically, navigate to the top level directory of the CD-ROM and double-click **setup.exe**.

The Rational Software Setup wizard prompts you through the ClearQuest Windows installation.

- 3 Choose the **Client** installation.

If you will be doing schema development, select the **Administrator** installation, which includes additional administrative tools.

- 4 Launch the License Administrator to enter your ClearQuest licenses.

Connecting to ClearQuest databases

After installing ClearQuest Windows as a client user, the first time client users run ClearQuest Windows, client users need to connect to an existing schema repository. You, the ClearQuest administrator, must provide them database properties information needed.

You can create a database profile for client users to use to connect to the schema repository, see step 6 of “Connecting to ClearQuest databases” on page 52.

Note: If you are using Oracle or DB2, your client users will need to install the respective client software before installing ClearQuest. For more information, see “Configuring an Oracle client installation for ClearQuest Windows” on page 29 or see “Creating a DB2 alias on client machine” on page 35.

The following instructions apply to client users who need to connect to a schema repository:

- 1 Launch the ClearQuest Maintenance Tool (**Start > Programs > Rational ClearQuest > ClearQuest Maintenance Tool**).

Note: The first time you launch ClearQuest Windows, the Maintenance Tool runs automatically.

- 2 Select **Connect to Existing schema repository** and click **Next**.
- 3 Select the vendor database that you plan to use, enter the properties appropriate for that vendor, then click **Next**.

Enter the information provided by your administrator, or, if your ClearQuest administrator created a user profile file (usually called `cqprofile.ini`) that includes the database information you need, click **Load Profile** to navigate to the profile file.

If you did not create a profile for client users, they must enter the following information:

- **MS_ACCESS**
 - Enter the entire path to the schema repository using a UNC style path. For example:

\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb

You can browse to the directory containing the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- **SQL_ANYWHERE**

- Enter the path to the schema repository using a UNC style path. For example:

\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb

You can browse to the directory containing the database by using Network Neighborhood, which preserves the UNC style path name.

- Enter the name of the database server.
- Enter the protocols used to communicate with the SQL Anywhere server.
- Enter the database host name.

- **SQL_SERVER**

- Enter an SQL Server database name for the database containing the schema repository.
- Enter the name of the database server.
- Enter the schema repository or read-only user login.
- Enter the password for the schema repository or read-only login.

- **ORACLE**

- Enter the SQL*Net Alias (alias pointing to the Oracle instance).
- Enter the Oracle login created for the schema repository.
- Enter the password for the login.

- **DB2**

- Enter the Database Alias name (alias pointing to the DB2 database).
- Enter the DB2 login created for the schema repository.
- Enter the password for the login.

4 Click **Finish** to complete the connection.

Enabling e-mail notification

After installing ClearQuest Windows, users must enable e-mail notification if they want to receive automatic e-mail messages from ClearQuest Windows. To do this:

- 1** Launch ClearQuest Windows (**Start > Programs > Rational ClearQuest > Rational ClearQuest**).
- 2** Choose **View > E-mail Options**. This opens the E-mail Setup dialog.
- 3** Select **Enable E-mail Notification**.
- 4** Select either **SMTP** or **MAPI**
- 5** If you entered SMTP:
 - Enter the SMTP host address of your mail server.
 - Enter your e-mail address.
 - Click **Finish**.
- 6** If you entered MAPI:
 - Choose a MAPI profile from the list.
 - Click **Finish**.

5

Installing ClearQuest Unix for end-users

This chapter describes how to install ClearQuest Unix. You, the ClearQuest administrator, set up the databases to use with ClearQuest, install ClearQuest, and provide the required setup information to each client user.

This chapter covers the following topics:

- “Understanding the install process” on page 56
- “Installing ClearQuest Unix client and Oracle Support” on page 57
- “Running ClearQuest Unix” on page 60
- “Enabling e-mail notification” on page 61

Understanding the install process

If you plan to use ClearQuest Unix clients with your ClearQuest installation, the installation must include the following:

- Oracle databases (for schema repository and user databases)
- OpenLink Request Broker (facilitates Oracle connections)
- ClearQuest Designer on Windows (for schema development)
- ClearQuest Unix client

You, the ClearQuest administrator, install ClearQuest Unix by performing the following steps:

- 1 On Unix, set up your database product. As the ClearQuest administrator, you are responsible for setting up the databases your users will use with ClearQuest. See the appropriate section:
 - “Setting up the Oracle Server” on page 28.

Note: If your ClearQuest installation will include ClearQuest Unix clients, your vendor database must be Oracle and it must be installed on a Unix server.

- 2 On Windows, install ClearQuest for Windows on the administrator’s workstation and create the ClearQuest databases. See “Installing ClearQuest for an administrator” on page 37.

Note: The ClearQuest administrator version must be installed on a Windows machine. All ClearQuest customizations are done with the ClearQuest Designer, a Windows-only application.

- 3 Set up your license server. See “Licensing ClearQuest” on page 111.
- 4 On Windows, Optionally, customize your installation. See the *Administering Rational ClearQuest* guide for details on customizing ClearQuest.
- 5 On Unix, install the ClearQuest Unix client on the server machine from which users will run ClearQuest. See “Installing ClearQuest Unix client and Oracle Support” on page 57.
- 6 Install OpenLink Request Broker to facilitate Oracle connections. See “Setting up the Oracle OpenLink Request Broker” on page 31

Installing ClearQuest Unix client and Oracle Support

For ClearQuest Unix, the system administrator needs to install the ClearQuest client software and let all client users know where to find the installation.

To install the ClearQuest client, do the following:

- 1 Log in as the user who will own the ClearQuest installation. This user will perform administrative functions such as managing the database registry. Note: All other users only need read-only access to the installation directories.
- 2 From the ClearQuest CD, run `rs_install`.
- 3 Accept the license agreement.
- 4 Select `u)Use existing licensing`.
- 5 Select `Configuration Selections`.
- 6 You can choose to install the ClearQuest Client and the OpenLink Request Broker (Oracle Support) all on the same machine as your Oracle installation, or you can install the ClearQuest client on a different machine. The OpenLink Request Broker must be on the same machine as the Oracle server.
- 7 You must install at least the Oracle Support option now in order to complete the rest of the installation. Select either:
 - `s1) *ClearQuest Client and Oracle Support for Unix`
 - `s2) *ClearQuest Client-Only for Unix`
 - `s3) *ClearQuest Oracle Support-Only for Unix`
- 8 Enter the directory where Rational products are installed. A ClearQuest directory (referred to here as `[CQ_Home]`) will be created within the Rational products root directory (referred to here as `[Rational_dir]`). If the directory does not exist, the install can create it for you as long as you have write privileges to the parent directory.
- 9 Select the licensing option that allows you to enter a `port@host` name.
- 10 Enter the `port@hostname` name. For example,
`27000@server`

where "port" is 27000 and "host" is the name of the Windows license server.

The "host" name needs to be a permanent name; if your network uses DHCP, you may need a variation or special form of the host name. Check with your network administrator.

Note: On HP-UX, "@" may be set to kill the input line. If so, you can escape the "@" with a backslash or just enter the host name.

- 11 Optionally, you can choose to test the license server at this time. Select option 2) to test the license server. This step may install a small part of the Unix license server software in order to perform the check. If the check fails, you may still proceed with the installation, but you will have to repeat the licensing setup at a later time.
- 12 Select f) forward to the next menu to continue.
- 13 Accept the default for the "Customize the install" prompt.
- 14 Choose the skip option for the "Install mode" prompt.
- 15 Select f) Forward to do the install.
- 16 When the installation finishes, you're asked to enter the location of where to store the registry information regarding the schema repository.

Note: This directory must be readable by all machines and users that will run ClearQuest. It must also be writable by the user who will be the ClearQuest administrator.

- 17** When finished with the installation, add the ClearQuest home directory

```
[Rational_dir]/ClearQuestClient/bin
```

to your path or source `cq_setup.csh` to set the ClearQuest home environment variable (`$CQ_HOME`):

```
source [Rational_dir]/cq_setup.csh
```

- 18** Type `Clearquest` to run ClearQuest.

- 19** The first time you run the ClearQuest/UNIX client, the Register Database dialog displays. Enter the information to connect to the schema repository as described below:

- Enter ORACLE as the vendor.
- Enter the Server name.
- Enter the SID. Note that the SID is case-sensitive.
- Enter the Oracle login and password you created for the schema repository.
- Click Apply.

- 20** If you need to make changes to Connect Options, connect to the schema repository from the command line and enter:

```
% cqreg register -v[endor] <db_vendor> -s[erver] <db_server>  
-d[atabase] <database_name> -u[ser] <user> -p[assword] <password>  
[-co <connect_options>] <options>
```

```
Options include: [-help] [-effort_only] [-force] [-verbose] [-errors]  
[-home <cq_home>] [-version <cq_version>] [-cq_databases <cq_databases>]
```

For `<connect options>` see the section “Creating ClearQuest databases” on page 39.

For example:

```
% cqreg register -v oracle -s myserver -d TEST -u cqadmin \  
-p cqadmin -co "SERVER_VER=8.0"
```

Running ClearQuest Unix

You should tell ClearQuest Unix client users where ClearQuest is installed. They can then run ClearQuest directly, or source a configuration file that will modify their path.

To run ClearQuest Unix,

- 1 Add the ClearQuest home directory to their path:

```
[Rational_dir]/ClearQuestClient/bin
```

or source `cq_setup.csh` to set the ClearQuest home environment variable (`$CQ_HOME`):

```
source [Rational_dir]/cq_setup.csh
```

- 2 To run ClearQuest Unix, type `clearquest`.

Enabling e-mail notification

After installing ClearQuest, users must enable e-mail notification if they want to send automatic e-mail messages from ClearQuest. To do this:

- 1 Launch ClearQuest. Type `ClearQuest` at a Unix shell prompt.
- 2 Within ClearQuest, choose **View > E-mail Options**. This opens the E-mail Setup dialog.
- 3 Select **Enable E-mail Notification**.
- 4 Enter your e-mail address.
- 5 Click OK.

6

Setting Up ClearQuest Web

This chapter describes how to set up the ClearQuest Web server for both Microsoft Internet Information Server version 4 (IIS 4) for Windows NT, and Windows 2000 Server, which includes Microsoft Internet Information Server version 5 (IIS 5).

This chapter covers the following topics:

- “Understanding the installation process” on page 64
- “Setting up ClearQuest Web for IIS 4” on page 65
- “Setting Up ClearQuest Web for IIS 5” on page 77
- “Enabling e-mail notification for web clients” on page 94
- “Providing ClearQuest Web information to web clients” on page 98

Understanding the installation process

The following are special considerations for using ClearQuest Web:

- ClearQuest Web does not support Microsoft Access databases.
- Your browser must have cookies enabled when using ClearQuest Web.
- Make sure your web server is set to display 256 colors. This is necessary for generating charts.

To install and configure ClearQuest Web on your Windows server, you must complete the following tasks:

Note: You must have first set up the vendor database that ClearQuest will use. See “Configuring vendor databases” on page 11.

- 1 If you are using Windows NT and want to use IIS 4.0, verify that Windows NT 4.0 Option Pack, which includes Microsoft Internet Information Server 4.0 (IIS), is installed on your web server.
- 2 Install ClearQuest on the Web server. See, “Installing ClearQuest for an administrator” on page 37.

Note: We recommend, for improved performance, security, and reliability, that the Web server machine and the database server machine be two different machines, each with its software installed onto an NTFS partition.

- 3 Follow the instructions in this chapter to configure Microsoft Internet Information Server to serve the ClearQuest Web pages.
- 4 Configure the web server so that web clients can take advantage of ClearQuest’s e-mail notification feature.
- 5 Provide users with the path to ClearQuest Web.

Setting up ClearQuest Web for IIS 4

This section is for users using Windows NT (Workstation or Server) with IIS 4. If you are using Windows 2000 Server, which has IIS 5 as an embedded component, see “Setting Up ClearQuest Web for IIS 5” on page 77.

This section contains the following:

- “Setting up an anonymous user account for IIS 4” on page 65
- “Creating a cache directory for IIS 4” on page 68
- “Configuring IIS 4.0 to serve ClearQuest Web pages” on page 69

Setting up an anonymous user account for IIS 4

Create an anonymous user account for IIS to use when it serves the ClearQuest pages. If you are using an SQL Server database, the anonymous user account should be known in the domain that contains the ClearQuest database, and should have full access to that database.

Create the anonymous user account

Create the anonymous user account as follows:

- 1 Log on as a Windows NT administrator.
- 2 If the web server belongs to a Windows NT domain, ask your Windows NT system administrator to create a domain user and provide you with the user name and password. (If not, go to Step 4.)
- 3 Run the User Manager (**Start > Programs > Administrative Tools > User Manager**), select **Policies > User Rights**, select the **Show Advanced Rights** checkbox, and give this user the following privileges on the Web server:
 - **Access this computer from network**
 - **Log on locally**
 - **Log on as a service**

Also provide access to any other resources used by your hook scripts such as mail accounts or auxiliary databases. Skip to Step 6.

- 4 If the web server operates in stand-alone mode (does not belong to a Windows NT domain), use the default anonymous account created by the IIS installation (IUSR_<machine_name>) for Step 5.
- 5 Run the User Manager (**Start > Programs > Administrative Tools > User Manager**), select **Policies > User Rights**, select the **Show Advanced Rights** checkbox, and give the IUSR_<machine_name> account the following privileges:
 - **Access this computer from network**
 - **Log on locally**
 - **Log on as a service**Also provide access to any other resources used by your hook scripts such as mail accounts or auxiliary databases.
- 6 Verify that the anonymous user account has a specific, known password (you will need it later). Make sure there are no password policies in effect such as “User must change password at next login,” because these prevent the anonymous user account from functioning properly.

Set up the registry key access privileges

Give the anonymous user account full access privileges to the HKEY_LOCAL_MACHINE\Software\Rational Software\ClearQuest registry key as follows.

- 1** Select **Run** from the Start menu and type REGEDT32 to run the REGEDT32 program.
- 2** In the HKEY_LOCAL_MACHINE MDI window, select **Software\Rational Software\ClearQuest**.
- 3** On the Registry Editor menu bar, select **Security > Permissions**.
- 4** In the Registry Key Permissions dialog box, select the anonymous user. For the type of access, select **Full Control**. Select **Replace Permission on Existing Subkeys** so that the anonymous user can update the entire registry tree below ClearQuest.
- 5** Close the REGEDT32 program.

Set up read access permission

Give the anonymous user account read access permission to the directory tree containing the ClearQuest web files (this is the www directory in the ClearQuest installation area).

Note: If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a Security tab and can skip this section.

- 1** Use the Windows Explorer to locate the directory in which you installed ClearQuest. Right-click the **www** directory and select **Properties** from the shortcut menu.
- 2** On the Properties dialog box, click the **Security** tab. Click **Permissions** and select **Replace Permissions on Subdirectories**.
- 3** On the Directory Permissions dialog box, click **Add**.

- 4 Select the anonymous user account.
 - If you chose the default local anonymous username in Step 2, set **List Names From** to the name of the local machine, click **Show Users** below the **Names** list, then select the IUSR_machinename account from the **Names** list.
 - If you are using a domain account, select that domain in the **List Names From** field, click **Show Users**, and select the domain account from the **Names** list.
- 5 Click **Add**.
- 6 Set **Type of Access** to Read.
- 7 Click **OK** to close the **Add Users and Groups** dialog box.
- 8 Click **OK** to close the **Directory Permissions** dialog box.
- 9 Click **OK** to close the **WWW Properties** dialog box.

Creating a cache directory for IIS 4

Create a cache directory in the ClearQuest Web directory hierarchy:

- 1 At the top of the web directory tree, there should be a directory called `cache`. If a `cache` directory does not exist, create one under the ClearQuest `WWW` directory. For example:

```
c:\Program Files\Rational\ClearQuest\WWW\cache
```

- 2 Give the anonymous user full access to everything in this directory tree.

Configuring IIS 4.0 to serve ClearQuest Web pages

This section describes how to configure the IIS 4.0 web server to serve ClearQuest Web pages.

- “Create a virtual directory for IIS 4” on page 69
- “Edit the properties of the virtual directory for IIS 4” on page 72
- “Edit the properties of the cache directory for IIS 4” on page 75
- “Edit the properties of the images directory for IIS 4” on page 76
- “Restart the web server for IIS 4” on page 76

Note: If the Internet Service Manager is not available, you must install the Windows NT 4.0 Option Pack. When installing the Option pack, be sure to explicitly select the Internet Service Manager.

Create a virtual directory for IIS 4

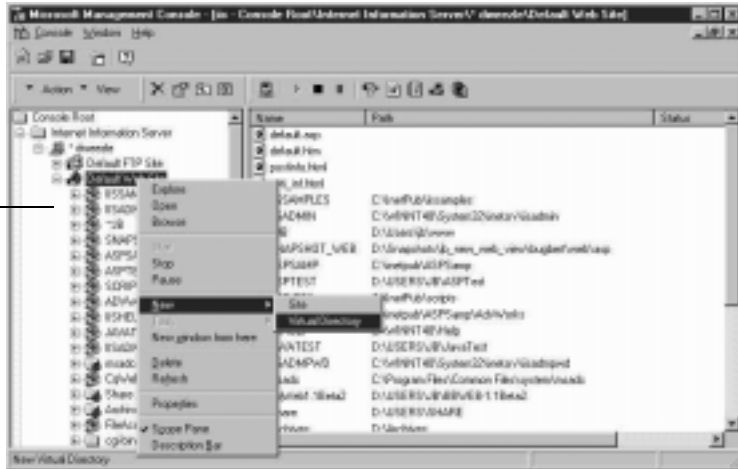
The first step in setting up IIS 4.0 is to create a virtual directory for the web. To create this directory, you use the Internet Service Manager program (Microsoft Management Console) that comes with IIS 4.0.

- 1 Start the Microsoft Management Console program (Internet Service Manager).

Start > Programs > Windows NT 4.0 Option Pack > Microsoft Internet Information Server > Internet Service Manager

- 2 In the Navigator window, right-click **Default Web Site**, then click **New > Virtual Directory** from the shortcut menu.

In the Navigator window, right-click **Default Web Site**.



- 3 In the New Virtual Directory Wizard, type an alias name, such as CqWeb. Do not use a “/” character in the alias name.

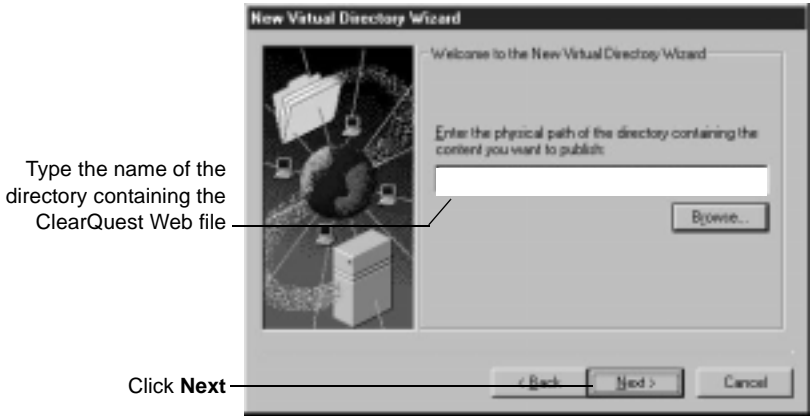
Type an alias name

Click **Next**



- 4 Type or browse to the name of the directory containing the ClearQuest Web files. These files are located in the WWW subdirectory of the ClearQuest installation directory. For example:

C:\Program Files\Rational\ClearQuest\WWW



- 5 Select the default permissions for the virtual directory:

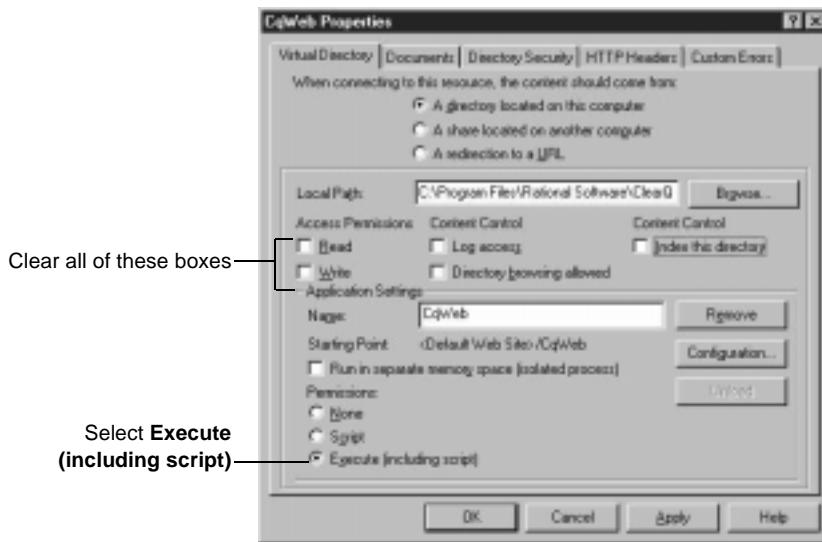


Edit the properties of the virtual directory for IIS 4

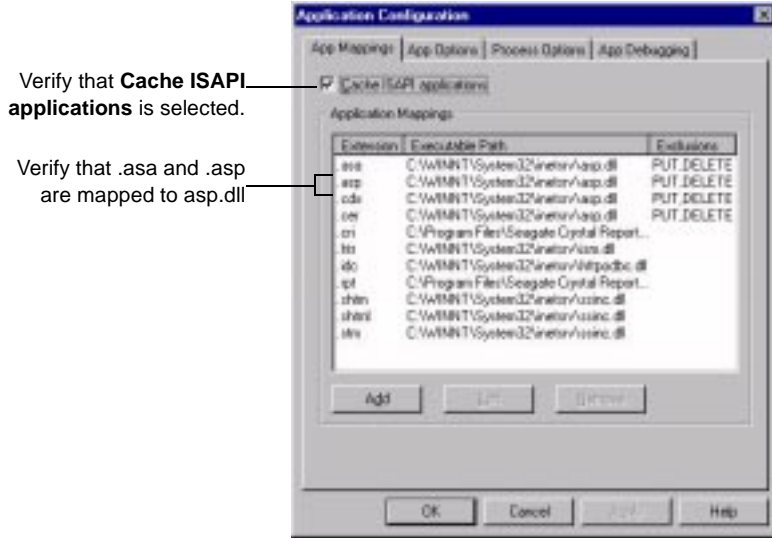
Edit the properties of the virtual directory as follows:

- 1 In the Microsoft Management Console left pane, navigate to the virtual directory you created earlier.
- 2 Right-click on the virtual directory and select **Properties** from the shortcut menu.
- 3 In the Properties dialog box, click the **Virtual Directory** tab.

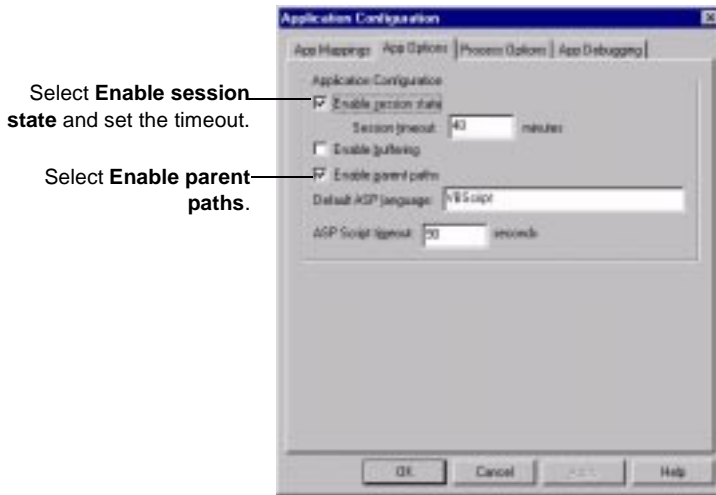
Note: You should *not* run ClearQuest Web in a separate memory space (as an isolated process). If you do so, e-mail rules will not work. If you need to run ClearQuest Web in a separate memory space, see the ClearQuest Release Notes (\\ClearQuest\readme.htm) for more information.



- 4 In the same Properties dialog box, click **Configuration**. In the Application Configuration dialog, click the **App Mappings** tab.



- 5 In the same Application Configuration dialog box, click the **App Options** tab.

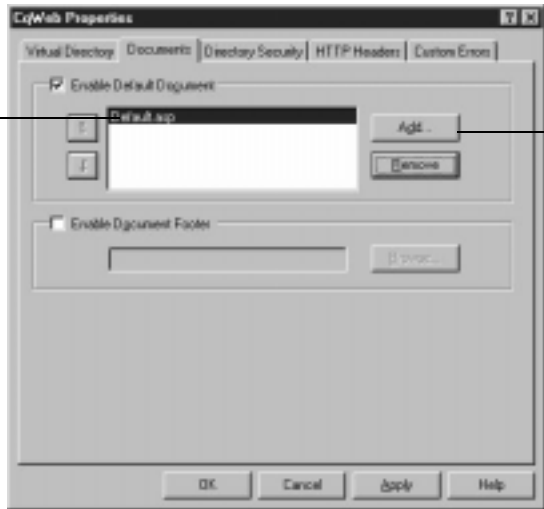


6 Click **OK** to return to the Properties dialog box.

7 In the Properties dialog box, click the **Documents** tab.

If necessary, add the Default.asp document to the list of documents...

then remove any other documents and select **Default.asp** as the default

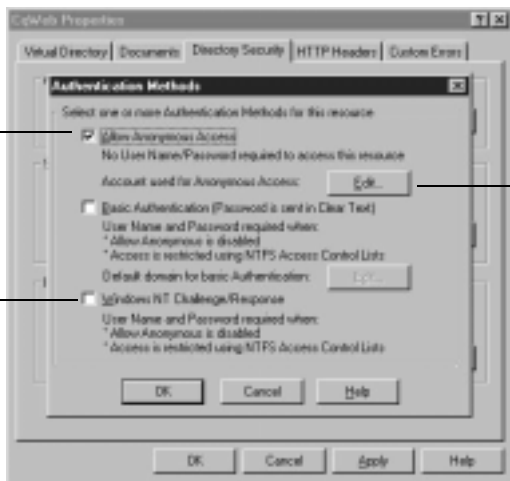


Click to add the Default.asp document to the list

8 In the same Properties dialog box, click the **Directory Security** tab. In the Anonymous Access and Authentication Control, click **Edit** to open the Authentication Methods dialog box.

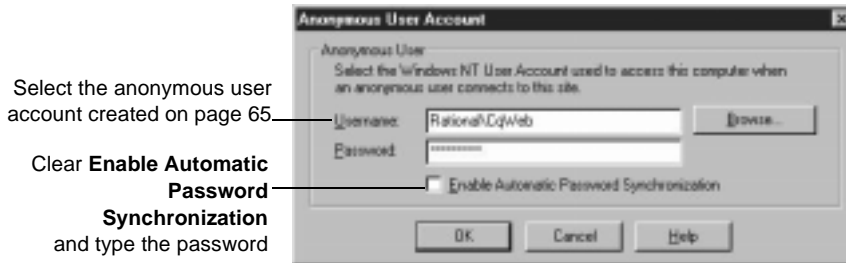
Select **Allow Anonymous Access**

Important: Verify that Windows NT Challenge/Response is **NOT** selected. If the box has a check mark, be sure to clear it.



Then click **Edit** to define the anonymous user account

9 Define the anonymous user account:



Note: ClearQuest Web does *not* work if **Enable Automatic Password Synchronization** is selected.

- 10** Click **OK**.
- 11** Type the password in the Confirm Password dialog box and click **OK**.
- 12** Click **OK** again to close the Properties dialog.

Edit the properties of the cache directory for IIS 4

Edit the properties of the cache subdirectory as follows:

- 1** In the Microsoft Management Console left pane, navigate to the cache directory under the virtual directory name.
- 2** Right-click the **cache** directory.
- 3** Click **Properties** from the shortcut menu.
- 4** In the Properties dialog box, click the **Directory** tab.
- 5** For Access Permissions, select only **Read**. Verify that no other options are selected.
- 6** For Permissions, select **None**.
- 7** Click **OK**.

Edit the properties of the images directory for IIS 4

Edit the properties of the images subdirectory as follows:

- 1** In the Navigator window of the Microsoft Management Console, expand the directory tree of the Default Web Site until you locate the images directory under your alias name.
- 2** Right-click the **images** directory.
- 3** Click **Properties** from the shortcut menu.
- 4** In the Properties dialog box, click the **Directory** tab.
- 5** For Access Permissions, select only **Read**. Verify that no other options are selected.
- 6** For Permissions, select **None**.
- 7** Click **OK**.

Restart the web server for IIS 4

Close the Microsoft Management Console, saving your console settings, then restart the web server.

You have completed installing and configuring the ClearQuest web server for IIS 4.

Setting Up ClearQuest Web for IIS 5

This section describes how to set up the ClearQuest Web server for Windows 2000 Server, which includes Microsoft Internet Information Server version 5 as an embedded component. If you are using Windows NT, see “Setting up ClearQuest Web for IIS 4” on page 65.

This section contains the following:

- “Setting up an anonymous user account for IIS 5” on page 77
- “Creating a cache directory for IIS 5” on page 81
- “Configuring IIS 5 to serve ClearQuest Web pages” on page 83

Setting up an anonymous user account for IIS 5

Create an anonymous user account for IIS to use when it serves the ClearQuest pages. If you are using an SQL Server database, the anonymous user account should be known in the domain that contains the ClearQuest database, and should have full access to that database.

Create the anonymous user account

Create the anonymous user account as follows:

- 1 Log on as a Windows 2000 administrator.
- 2 If the web server belongs to a Windows domain, ask your Windows system administrator to create a domain user and provide you with the user name and password. (If not, go to Step 4.)
- 3 For this domain user, click **Start > Programs > Administrative Tools > Local Security Policy**, select **Local Policies > User Rights Assignment**. For each of the following double-click to view the **Local Security Setting** dialog box then use the **Add** button to grant this user the following privileges on the Web server:
 - **Access this computer from network**
 - **Log on as a service**
 - **Log on locally**

Also provide access to any other resources used by your hook scripts, such as mail accounts. (Go to Step 6.)

- 4 If the web server operates in stand-alone mode (does not belong to a Windows NT domain), use the default anonymous account created by the IIS installation (IUSR_<machine_name>). Click **Start > Programs > Administrative Tools > Local Security Policy**, select **Local Policies > User Rights Assignment**, and use the **Add** button to grant this user the following privileges on the Web server:

- **Access this computer from network**
- **Log on as a service**
- **Log on locally**

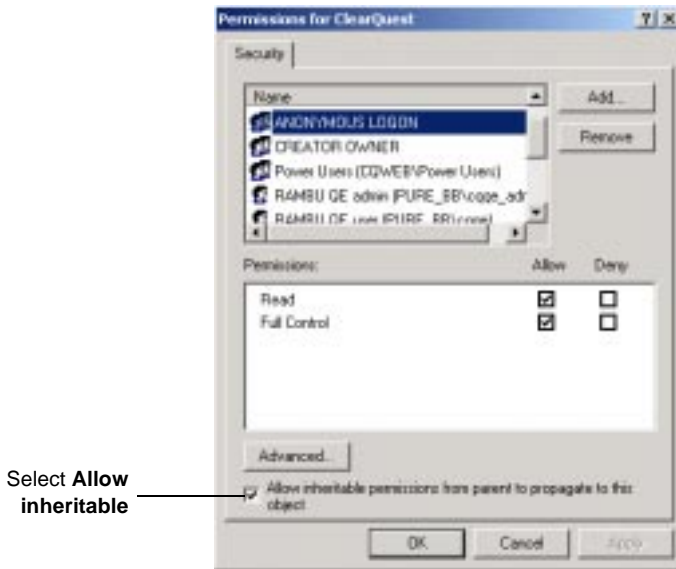
Also provide access to any other resources used by your hook scripts, such as mail accounts.

- 5 Verify that the anonymous user account has a specific, known password (you will need it later). Make sure there are no password policies in effect such as “User must change password at next login,” because these prevent the anonymous user account from functioning properly.

Set up registry key access privileges

Give the anonymous user account full access privileges to the HKEY_LOCAL_MACHINE\Software\Rational Software\ClearQuest registry key as follows.

- 1 Select **Run** from the Start menu and type REGEDT32 to run the REGEDT32 program.
- 2 In the HKEY_LOCAL_MACHINE MDI window, select **Software\Rational Software\ClearQuest**.
- 3 On the Registry Editor menu bar, select **Security > Permissions**.
- 4 In the Registry Key Permissions dialog box, select the anonymous user. For the Permissions, select **Full Control**.
- 5 Select **Allow inheritable permissions**.



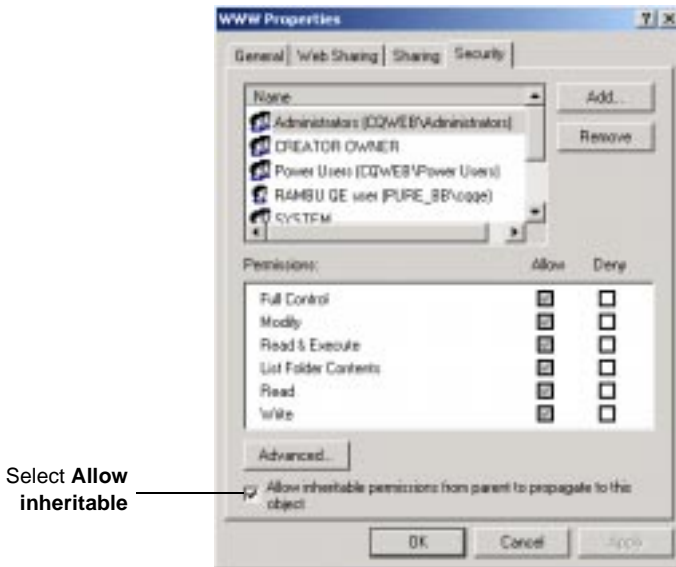
- 6 Close the REGEDT32 program.

Set up read access permission

Give the anonymous user account read access permission to the directory tree containing the ClearQuest web files (this is the `WWW` directory in the ClearQuest installation area).

Note: If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a Security tab and can skip this section.

- 1 Use the Windows Explorer to locate the directory in which you installed ClearQuest. Right-click the **www** directory and select **Properties** from the shortcut menu.
- 2 On the Properties dialog box, click the **Security** tab and select **Allow inheritable permissions**.



- 3 On the Security tab, click **Add**.

- 4 Select the anonymous user account.
 - If you chose the default local anonymous username in Step 2, set **Look in** to the name of the local machine, then select the IUSR_machinename account from the **Name** list.
 - If you are using a domain account, select that domain in the **Look in** field, and select the domain account from the **Name** list.
- 5 Click **Add**, then click **OK**.
- 6 On the Security tab, in the **Permissions** section, select the checkbox to allow Read, then click **OK**.

Creating a cache directory for IIS 5

Create a cache directory in the ClearQuest Web directory hierarchy.

Note: If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a Security tab and can skip this section.

- 1 At the top of the web directory tree, there should be a directory called `cache`. If a `cache` directory does not exist, create one your ClearQuest WWW directory. For example:

```
c:\Program Files\Rational\ClearQuest\WWW\cache
```

- 2 Right-click the cache directory to see its properties.
- 3 On the Properties dialog box, click the Security tab.

- 4 Select the anonymous user account.
 - If you chose the default local anonymous username in Step 2, set **Look in** to the name of the local machine, then select the IUSR_machinename account from the **Name** list.
 - If you are using a domain account, select that domain in the **Look in** field, and select the domain account from the **Name** list.
- 5 Click **Add**, then click **OK**.
- 6 In the **Permissions** section, select the checkbox to allow Full Control, then click **OK**.

Configuring IIS 5 to serve ClearQuest Web pages

This section describes how to configure the IIS 5 web server to serve ClearQuest Web pages.

- “Create a virtual directory for IIS 5” on page 83
- “Edit the properties of the virtual directory for IIS 5” on page 87
- “Editing the properties of the cache directory for IIS 5” on page 92
- “Edit the properties of the images directory for IIS 5” on page 92
- “Restart the web server for IIS 5” on page 93

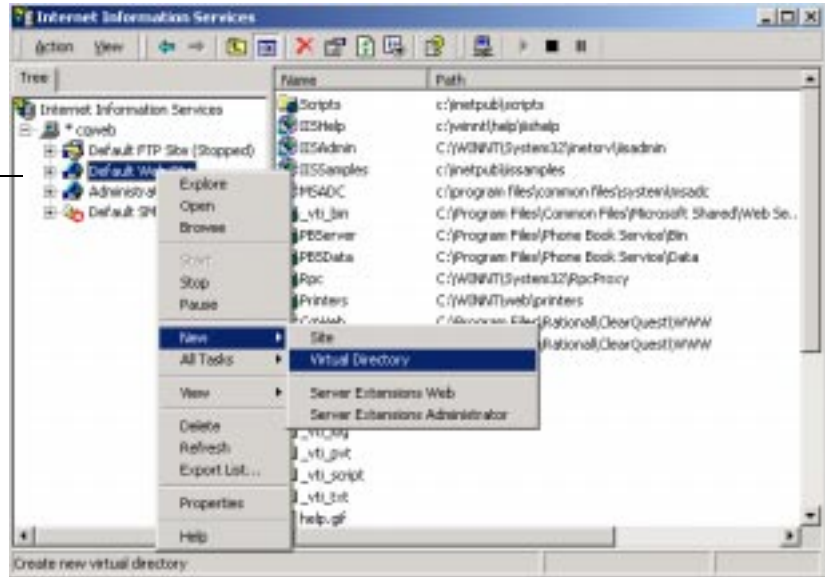
Create a virtual directory for IIS 5

Create a virtual directory for the web as follows.

- 1 Start the Internet Services Manager.
Start > Programs > Administrative Tools > Internet Services Manager
- 2 In the Navigator window, right-click **Default Web Site**.

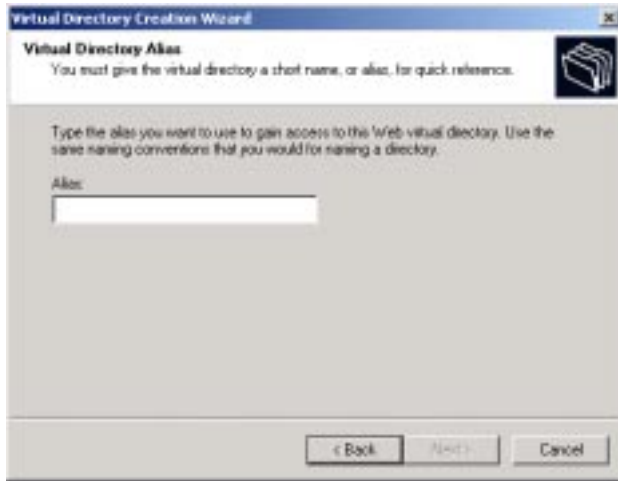
3 On the shortcut menu, click **New > Virtual Directory**.

In the Navigator window, right-click **Default Web Site**.



4 Click **Next** when the Virtual Directory Creation Wizard appears.

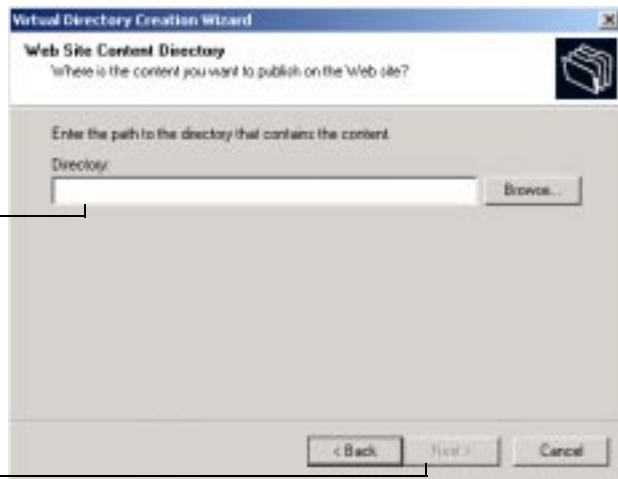
- 5 Type an alias name, such as CqWeb. Do not use a “/” character in the alias name. Then click **Next**.



- 6 Type or browse to the name of the directory containing the ClearQuest Web files. These files are located in the WWW subdirectory of the ClearQuest installation directory. For example:

C:\Program Files\Rational\ClearQuest\WWW

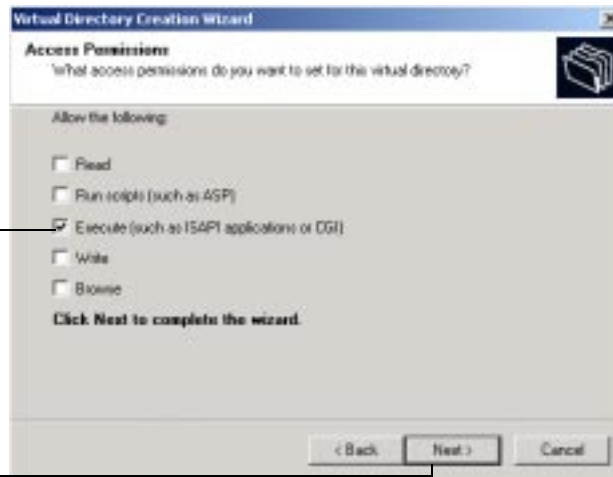
Type (or browse to) the directory containing the ClearQuest Web file



Then click **Next**

7 Clear **Read**, clear **Run scripts**, and select **Execute**. Then click **Next**.

Select **Execute**,
and verify that nothing
else is selected



Then click **Next**

8 Click **Finish** to complete the Wizard.

Edit the properties of the virtual directory for IIS 5

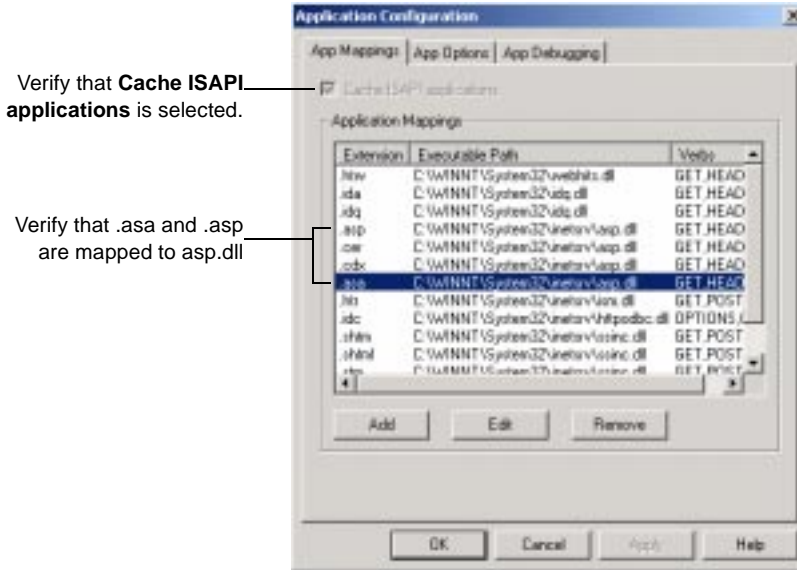
Edit the properties of the virtual directory as follows:

- 1 In the Internet Information Services left pane, navigate to the virtual directory you created earlier.
- 2 Right-click on the virtual directory and select **Properties** from the shortcut menu.
- 3 In the Properties dialog box, click the **Virtual Directory** tab.

Verify that **Scripts and Executables** is selected



- 4 In the same Virtual Directory tab, click **Configuration**. In the Application Configuration dialog, click the **App Mappings** tab.



- 5 In the same Application Configuration dialog box, click the **App Options** tab.

Select **Enable session state** and set the timeout interval

Select **Enable parent**

Click **OK**



6 In the Properties dialog box, click the **Documents** tab.

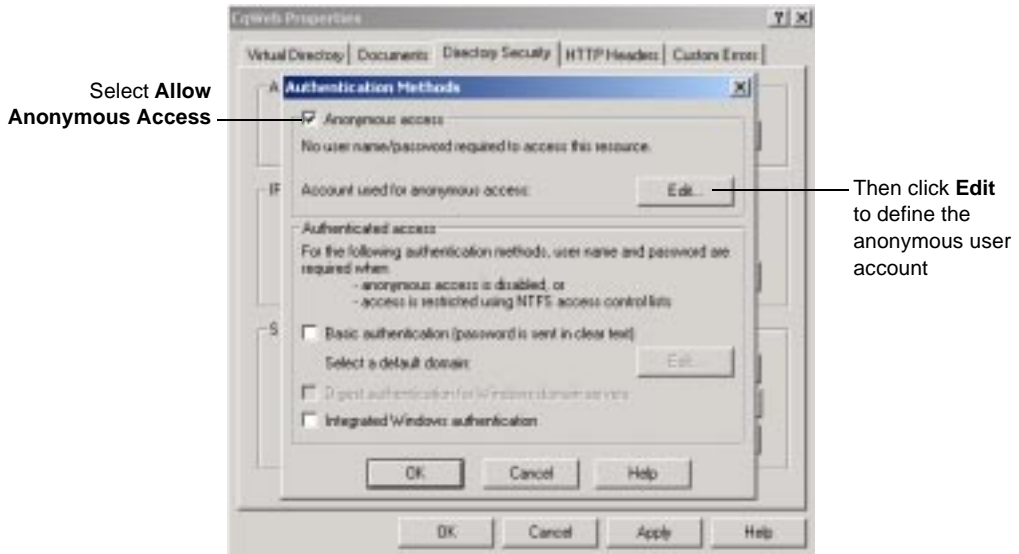
If necessary, add the Default.asp document to the list of documents...

then remove any other documents and select **Default.asp** as the default

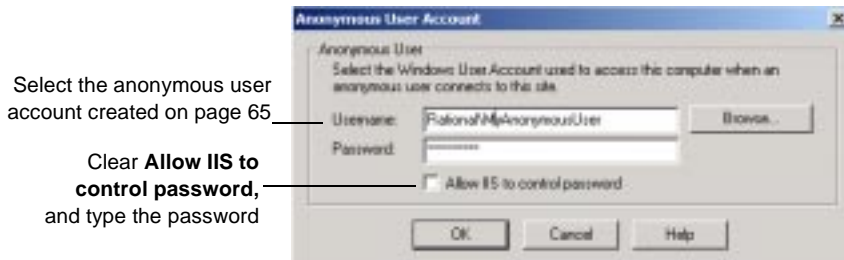


Click to add the Default.asp document to the list

- In the same Properties dialog box, click the **Directory Security** tab. In the Anonymous Access and Authentication Control, click **Edit** to open the Authentication Methods dialog box.



- Define the anonymous user account:



- Click **OK**.
- Type the password in the Confirm Password dialog box, then click **OK**.
- Click **OK**, then click **OK** again to close the Properties dialog.

Editing the properties of the cache directory for IIS 5

Edit the properties of the cache subdirectory as follows:

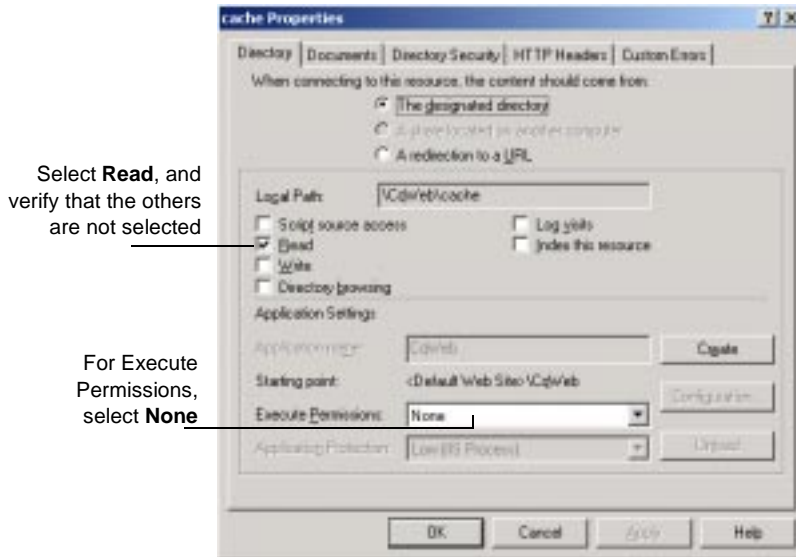
- 1** In the Internet Information Services left pane, navigate to the cache directory under the virtual directory name.
- 2** Right-click the **cache** directory.
- 3** Click **Properties** from the shortcut menu.
- 4** In the Properties dialog box, click the **Directory** tab.
- 5** Select the **Read** check box. Verify that no other options are selected.
- 6** For Execute Permissions, select **None**.
- 7** Click **OK**.

Edit the properties of the images directory for IIS 5

Edit the properties of the images subdirectory as follows:

- 1** In the Navigator window of Internet Information Services, expand the directory tree of the Default Web Site until you locate the images directory under your alias name.
- 2** Right-click the **images** directory.
- 3** Click **Properties** from the shortcut menu.

- 4 In the Properties dialog box, click the **Directory** tab.
- 5 Select the **Read** check box. Verify that no other options are selected.
- 6 For Execute Permissions, select **None**.



- 7 Click **OK**.

Restart the web server for IIS 5

Close Internet Information Services, saving your console settings, then restart the web server.

You have completed installing and configuring the ClearQuest web server for IIS 5.

Enabling e-mail notification for web clients

ClearQuest clients use e-mail notification according to the business rules of your schema. To extend e-mail notification support to users of the web client, perform the following steps.

- 1 Copy the code below into a text editor.

- For Windows NT,

```
REGEDIT4
```

```
[HKEY_USERS\.DEFAULT\Software\Rational Software\ClearQuest\  
st\  
<version>\SendMail]  
"MailTransport"="Protocol"  
"MAPIProfile"="MyMAPIProfile"  
"SendActive"=dword:00000001  
"SMTPHost"="MyMailHost"  
"RealName"="Web Server On \\\MyWebServerMachine"  
"ReplyTo"="MyGenericReturnAddress@MyDomainName"
```

- For Windows 2000,

```
Windows Registry Editor Version 5.00
```

```
[HKEY_USERS\.DEFAULT\Software\Rational Software\ClearQuest\  
st\  
<version>\SendMail]  
"MailTransport"="Protocol"  
"MAPIProfile"="MyMAPIProfile"  
"SendActive"=dword:00000001  
"SMTPHost"="MyMailHost"  
"RealName"="Web Server On \\\MyWebServerMachine"  
"ReplyTo"="MyGenericReturnAddress@MyDomainName"
```

The <version> number represents the current ClearQuest software product version. To get this, start the ClearQuest Windows client GUI, point to Help > About, and note the value in the "Version:" field. If you have a service pack release, enter just the first token ("1.1" in this example).

- 2** Edit the pertinent entries (MailTransport, MAPIProfile, SMTPHost, RealName, and ReplyTo) of the text in step 1 so that
 - Protocol is either SMTP or MAPI
 - MyMAPIProfile is the name of your MAPI profile (this value is ignored if MailTransport is set to anything other than MAPI)
 - MyMailHost is the name of your mail host computer if you are using SMTP
 - MyWebServerMachine is the name of your web server
 - MyGenericReturnAddress@MyDomainName should be replaced by the return address to be used for notification mail messages sent by ClearQuest. This address should be a valid e-mail address on the mail server you are using.
- 3** Save the file using the following naming convention: <filename>.reg.
- 4** In Windows Explorer, navigate to the location where you saved the new file, then double-click it to import it to the registry.

Set up registry key access privileges

Give the anonymous user account full access privileges to the HKEY_USERS\.Default\Software\Rational Software\ClearQuest\\SendMail registry key as follows.

For Windows NT,

- 1 Select **Run** from the Start menu and type REGEDT32 to run the REGEDT32 program.
- 2 In the HKEY_USERS window, select **.Default\Software\Rational Software\ClearQuest\\SendMail**.
- 3 On the Registry Editor menu bar, select **Security > Permissions**.
- 4 Click **Add** to add the anonymous user account.
- 5 In the **Add Users and Groups** dialog box,
 - If you chose the default local anonymous username, set **List Names From** to the name of the local machine and click **Show users** to view the list of domain accounts. Select the IUSR_machinename account from the **Names** list.
 - If you are using a domain account, select that domain in the **Look in** field and click **Show users** to view the list of domain accounts. Select the domain account from the **Name** list.
- 6 Click **Add**.
- 7 For the type of access, select **Full Control**.
- 8 Click **OK**.
- 9 Select **Replace Permission on Existing Subkeys** so that the anonymous user can update the entire registry tree below ClearQuest.
- 10 Click **OK**.
- 11 Close the REGEDT32 program.

For Windows 2000,

Give the anonymous user account full access privileges to the HKEY_USER\.DEFAULT\Software\Rational Software\\ClearQuest\SendMail registry key as follows.

- 1 Select **Run** from the Start menu and type REGEDT32 to run the REGEDT32 program.
- 2 In the HKEY_USER window, select **.DEFAULT\Software\Rational Software\ClearQuest\\SendMail**.
- 3 On the Registry Editor menu bar, select **Security > Permissions**.
- 4 Click **Add**.
- 5 Select the anonymous user account.
 - If you chose the default local anonymous username in Step 2, set **Look in** to the name of the local machine, then select the <user_account> account from the **Name** list.
 - If you are using a domain account, select that domain in the **Look in** field. Select the domain account from the **Names** list.
- 6 Click **Add**.
- 7 Click **OK** to close the dialog box.
- 8 In the Permissions area, allow **Full Control** and **Read** permissions.
- 9 Select **Allow inheritable permissions from parent to propagate from this object**.
- 10 Click **Advanced**.
- 11 Select **Reset permissions on all child objects...**
- 12 Click **OK**.
- 13 Click **Yes**.
- 14 Click **OK** to close the **Permissions for SendMail** dialog box.
- 15 Close the REGEDT32 program.

Providing ClearQuest Web information to web clients

To enable your users to access ClearQuest over the web, tell them to enter the URL:

```
http://<host>/<alias>
```

where <host> is the host name of the ClearQuest Web server machine, and <alias> is the directory containing the ClearQuest Web files.

Using the Advanced Query editor

ClearQuest Web's advanced query editor requires Java Runtime (JRE) plug-in. For Windows platforms, this plug-in is provided by ClearQuest Web if it is not already installed on the client machine. For Unix platforms, users are directed to the JavaSoft web site which may or may not have a download for the desired platform.

Administrator note: The Java Runtime Environment is under active development by JavaSoft, and may not be available for all platforms. Consult the JavaSoft and Netscape web sites for details. On platforms where the JRE is not available, clients will not be able to use the Advanced Query Editor function of ClearQuest Web.

7

Upgrading ClearQuest

This chapter describes how to upgrade your existing ClearQuest installation. Before you begin the upgrade, read the release notes (`\\ClearQuest\readme.html`) to become familiar with what has changed in this release.

Topics covered in this chapter include:

- “Understanding the upgrade process” on page 100
- “Preparing to upgrade” on page 101
- “Performing a test upgrade” on page 102
- “Performing the production upgrade” on page 107
- “Upgrading clients” on page 108
- “Upgrading ClearQuest Web” on page 109

Note: If you are using Rational ClearQuest/TeamTest Edition, see the Getting Started with Rational ClearQuest TeamTest Guide This guide is available as a Portable Document Format (PDF) file in the `\\ClearQuest\books` directory.

Understanding the upgrade process

The following steps summarize the upgrade procedure. The sections of this chapter describe the steps in detail.

- 1 Read the ClearQuest release notes (`\\Program Files\Rational\ClearQuest\readme.htm`) to learn what has changed in this release.
- 2 Read this chapter and be sure you understand the upgrade procedure before you begin.
- 3 **Warning:** Back up your current schema repository and user databases.
- 4 Perform a test upgrade.
 - Create new, empty vendor databases for your schema repository and user databases.
 - Install the new version of ClearQuest.
 - Upgrade your schema with upgrade schema packages, if necessary.
 - Use the ClearQuest Maintenance Tool to upgrade your schema repository and user databases.
 - Unlock your old databases so users can continue to work with those databases during the testing period.
- 5 Perform the upgrade on your production databases.
- 6 Notify your users of the new database connection information.

Important: If you are using multiple products from the Rational Suite, all products must be from the same Suite version (installed from the same CD-ROM). If you want to upgrade a product from the Suite, uninstall all Rational Suite products and install the desired products from the newer Suite CD-ROM.

Preparing to upgrade

The ClearQuest upgrade process upgrades the application and your databases. Because upgrading changes the underlying structure of your data and can change your schemas, we highly recommend the following:

- Do complete backups of your databases.

Having a backup is the only way to be assured that you can recover your schemas and user data if something goes wrong during the upgrade process.

- Do a test upgrade.

By testing the upgrade, you can be sure that your data upgrades successfully and your customizations work with the new release. Testing also gives you the chance to try new functionality in the form of Packages (for more information on packages, see the release notes).

You should only upgrade your user databases when you completely understand the upgrade process and are sure the upgrade works with your customizations.

Note: Upgrading might fail if you have custom database tables that were not created by ClearQuest. For information about upgrading if you have custom database tables, read the release notes (`\\Program Files\Rational\ClearQuest\readme.htm`).

Performing a test upgrade

We strongly recommend the following steps for performing a test upgrade. You should be sure the process works before upgrading your production databases.

Database locking

To upgrade, install the latest version of ClearQuest, then use the ClearQuest Maintenance Tool to upgrade your databases. After ClearQuest upgrades your data, it locks your original databases. When your original databases are locked, you have two options for how to proceed with the upgrade:

- You can complete the entire upgrading testing with the original databases locked.

This means that your users will not be able to use ClearQuest until the upgrade testing is completed. How long that takes depends on the size and complexity of your database and the amount of testing you do. If the upgrade is successful, upgrade your client installations, and notify users about how to connect to the upgraded databases.

- You can unlock your original databases while you test the upgrade.

This means that your users can continue to use your current version of ClearQuest and continue to enter records while the upgrade testing is performed. The only down time for your users occurs while the actual database upgrade and unlock procedures are being performed. If the upgrade test is successful, you must discard the test databases and perform the process again to upgrade the most current data.

To unlock your original schema repository and user databases, see “Unlocking your original databases” on page 105.

Upgrade steps

The upgrade steps are the same whether you are performing a test upgrade or the final production upgrade. We highly recommend performing a test run. The following steps assume you are doing a test upgrade first.

To perform an upgrade:

1 Back up your data.

Use your vendor tools to back up your schema repository and user databases. Upgrading changes the underlying structure of your data and can change your schemas. We strongly recommend you have a backup to revert to it if necessary. Install the latest version of ClearQuest on your test machine using the Administrator installation.

2 Create new, empty vendor databases for your schema repository and user databases. You should create the new databases in a new test directory or on a test server. For information on creating vendor databases see:

- “Setting up Microsoft Access” on page 13
- “Setting up SQL Anywhere” on page 14
- “Setting up Microsoft SQL Server Version 6.5” on page 19
- “Setting up Microsoft SQL Server 7 and 2000” on page 24
- “Setting up the Oracle Server” on page 28

Warning: Create empty databases only. Do not use your vendor database tools to move or copy the data. ClearQuest updates the data structure and moves it into the new databases as part of the upgrade process.

3 Follow the installation steps in “Installing ClearQuest for an administrator” on page 37 to install the new version of ClearQuest.

4 Notify users to log off from ClearQuest, and shut down your web server.

Users should not access ClearQuest during the upgrade process.

Note: Some high-end databases give the administrator a tool for logging users off from the database. Check your vendor database to see if it has such a tool.

5 Upgrade your schema repository and user databases.

- a Run the ClearQuest Maintenance Tool from the Start menu.
- b Select the **Upgrade schema repository and/or user database(s)** and click Next.
- c Specify the schema repository to upgrade from (your existing production schema repository). Click **Next**.
- d To upgrade databases associated with this schema repository, select the **Upgrade user databases** option.
- e Enter the ClearQuest login name and password for a ClearQuest user account with Super User privileges, then click **Next**.
- f Enter the schema repository to upgrade to (the new, empty database you created), then click **Next**.
- g For each of your user databases, enter the user database to upgrade to (the new, empty databases you created), then click **Finish**.

ClearQuest upgrades your schema repository and notifies you when the process is complete.

6 Upgrade your schema by applying schema packages.

ClearQuest uses schema packages to add functionality to your schema. When you upgrade to a new version of ClearQuest, there are often "upgrade packages" that you'll need to apply to your schema before deploying ClearQuest. See the release notes for which upgrade packages may be needed for your schema. For example, if you are upgrading from release 1.1 and had applied e-mail rule or integration add-ins, you must apply certain upgrade packages to your schemas.

To add packages,

- a Start ClearQuest Designer.
- b Choose **View > Schema Summary** to determine the packages that are currently applied to the schema.
- c Refer to release notes to see which schema packages need to be upgraded.
- d Choose **Package > Package Wizard**.

- e Use the Package Wizard to apply packages. For more information, see *packages, installing into a schema* in the ClearQuest Designer Help Index.
- 7 After upgrading your user databases to the new version of ClearQuest, you also need to upgrade them to use the latest version of the schema that incorporates the upgrade packages. For more information, see **Working with Databases > Upgrading user databases** in the ClearQuest Designer Help Contents tab.
 - 8 Determine whether you want to unlock your original databases and allow users to continue working with ClearQuest during upgrade testing. If you choose to unlock the database, see “Unlocking your original databases” on page 105.
 - 9 Test the application.

Enter a few test records and move them through your entire state model to be sure the upgrade is working correctly.

Unlocking your original databases

If you choose to allow users to continue using your original databases while you test the upgrade, you must unlock the database.

Note: After you perform the final upgrade, do not unlock your original databases. Keeping the original databases locked prevents your users from accessing the wrong databases.

- 1 Start a command window ("DOS prompt"), and change to the new ClearQuest home directory.

- 2** To unlock the schema repository, type the command for your vendor database:

```
> installutil unlockschemarepo dbvendor server db  
dbologin dbopassword " "
```

where:

- `dbvendor` (vendor database) is either:
 - `SQL_SERVER` for SQL Server databases
 - `MS_ACCESS` for Microsoft Access
 - `SQL_ANYWHERE` for Sybase SQL Anywhere
 - `ORACLE` for Oracle
 - `server` is either:
 - the hostname of the SQL Server database server
 - the SQL Anywhere database server name
 - the Oracle SQL*Net alias
 - an empty string (“”) for Microsoft Access
 - `db` is the database name containing your original schema repository for Oracle and SQL Server, or the full path to the database for Microsoft Access and SQL Anywhere
 - `dbologin` is the userid that owns the database (use `admin` for Microsoft Access or SQL Anywhere)
 - `dbopassword` is the password to that userid (use `admin` for Microsoft Access or SQL Anywhere)
- 3** To unlock user databases, repeat the above steps with the following exceptions:
- the *installutil* subcommand to use is *unlockuserdb* instead of *unlockschemarepo*
 - point to the server database containing the original user database, not the schema repository

Performing the production upgrade

After you have performed a test upgrade and are comfortable with the process, you are ready to upgrade your production schema repository and user databases.

- 1 Determine if you need to perform the upgrade on your production database.
 - a If you chose to leave your production database locked during testing and the test upgrade was successful, you can put your upgraded databases into production.
 - b If you choose to allow users to continue working with your production database during test, you need to repeat the upgrade process (see “Upgrade steps” on page 103), but this time you will not unlock your original databases.
- Note:** You will need to create new target databases before repeating the upgrade steps for production databases.
- 2 Inform users of the new connection information to use when upgrading their client installations of ClearQuest.

Upgrading clients

Each client installation should be upgraded by uninstalling the current ClearQuest installation, installing the latest version of ClearQuest (see “Installing ClearQuest Windows for end-users” on page 51 and “Installing ClearQuest Unix client and Oracle Support” on page 57), and connecting to the newly upgraded databases.

Note: Uninstalling the current version does not delete your databases or license information.

After upgrading, users who had enabled e-mail notification must reenable it. To do this:

- 1** Choose **View > E-mail Options**. This opens the E-mail Setup dialog.
- 2** Select **Enable E-mail Notification**.
- 3** Select either **SMTP** or **MAPI**
- 4** If you entered SMTP:
 - Enter the SMTP host address of your mail server.
 - Enter your e-mail address.
 - Click **Finish**.
- 5** If you entered MAPI:
 - Choose a MAPI profile from the list.
 - Click **Finish**.

Upgrading ClearQuest Web

To upgrade ClearQuest Web:

- 1** If you have not done so already, shut down your web server.
- 2** Uninstall the current version and install the new version of ClearQuest on your Web server. See “Installing ClearQuest for an administrator” on page 37.
- 3** Repeat all the steps in Chapter 6, “Setting Up ClearQuest Web” on page 63.
- 4** Restart your web server.

8

Licensing ClearQuest

This chapter gives an overview on how ClearQuest licenses work. The ClearQuest administrator sets up and maintains licenses using the Rational License Administrator.

For more information about licensing Rational Software products, see the book, “*Administering Licenses for Rational Software*”.

Working with Rational Software licensing

Rational Software product licensing provides two types of licenses:

- **Node-locked license:** enables a single user to install and use a Rational Software product on a specific system.
- **Floating license:** enables a specified number of users to install and use a Rational Software product on their systems. Floating licenses are shared among all users of the licensed software.

Note: If you purchase ClearQuest with a node-locked license, your ClearQuest Web functionality is limited to the ability to submit defects and to run one query (predefined by your ClearQuest administrator). To get full ClearQuest Web functionality, you need to purchase a floating license.

The license key certificate included with your purchase of ClearQuest indicates the type of licenses you are working with and the license keys you need to install.

Rational Software makes it easy to install and maintain licenses by providing the Rational License Administrator. Rational Software also provides GLOBEtrouter Inc.'s FLEXIm License Manager for administering floating licenses.

The Rational License Administrator is automatically installed when you install ClearQuest. To use the Rational License Administrator, select **Rational ClearQuest > License Administrator** from the Start menu. For information about installing your product licenses so you can get started using ClearQuest, see the Rational License Administrator online Help.

To install the FLEXIm License Manager, select **GLOBEtrouter FLEXIm License Server** from the list of products displayed in the Rational Software Setup program. For additional information about FLEXIm licensing, see the Rational License Administrator online Help.

9

Silent Installation of Rational ClearQuest

Silent Installation of Rational ClearQuest

You can configure Rational Software Setup to perform silent installations of Windows versions of Rational software. Silent installations allow you to perform an installation of a Rational Software product, using the same parameters, repeatedly on a number of systems.

The following sections provide a brief summary of the silent installation features.

Note: We recommend you read Rational's *Silent Installation White Paper* before you attempt a silent installation. The white paper is available from the Rational Web site at <http://www.rational.com/>. Select the following links in order: Technical Support, White papers, and Rational Suite.

Overview of Silent Installations of Rational ClearQuest

This section describes how to perform a silent install. The basic steps, explained below, are:

- 1 Record an installation session.
- 2 Optionally, add a post-installation command to the recorded installation.
- 3 Execute the installation procedure.

Recording a Software Installation of Rational ClearQuest

You can record a software installation session and then use the responses that you provide to replay the installation. At the end of the recorded installation procedure, you will be given the option to exit without installing the product.

- 1 Insert the Rational ClearQuest software CD in a CD drive.
- 2 Open a command window on your system and run `RSSetup` with the `-autocapture` switch. For example:

```
<Install Location>\setup\rssetup -autocapture
```

Where `<Install Location>` is the location of the Rational ClearQuest software CD.

- 3 When the Rational Software Setup program starts, proceed with the installation procedure on “Understanding the install process” on page 9. Your responses will be recorded in the responses file which is named as follows:

```
<Install Path>\RSSetup\response.ini
```

Note: The option to use a temporary license is not supported when using the `-autocapture` switch. The silent installation procedure will not support the capture of license certificate information into the `response.ini` file.

- 4 After you have answered all of the questions related to the installation, you will be prompted to continue with the installation of the product or to exit from the setup program. Click **OK** to proceed with the installation or **Cancel** to exit. Even if you cancel at this point, your answers are still saved.

Example

The following example shows how to record an installation of Rational ClearQuest.

```
<Install Location>\setup\rssetup -autocapture /product  
ClearQuest-1.1
```

Specifying a Post-Installation Command

You can specify a command that will be performed after the silent installation has completed.

After you have completed preparation for a silent installation, perform the following steps:

- 1 Edit the response file. Append a line similar to the following to the end of the file. The label [PostInstallCmd] is required.

```
[PostInstallCmd]  
Command=post-installation-commands.bat
```

where, the `post-installation-commands.bat` is a batch file that contains the commands you want to execute. Such a file might contain the following commands:

```
licadmin -fserver.txt  
net send administrator "Installation Complete"
```

In this example, the License Key Administrator, `licadmin`, starts and uses the information in `server.txt` to specify the name of the license server that the current system will use. The batch file then sends a message to the administrator, indicating that the installation procedure is complete.

- 2 Save the response file to a unique name (to ensure that is it not overwritten by subsequent autocaptures). For example, save the response file with a name such as `c:\responses\ent-w-post.ini`

Performing a Silent Software Installation

After you have recorded your responses, use the response file to replay the installation. For example:

```
<Install Location>\setup\rssetup -silent  
-response:response-path
```

Where `response-path` is the path of the response file. The default path is as follows:

```
"c:\Program Files\Rational\RSSetup\response.ini"
```

Note: If a response file is in the default location, that response file will be used each time you run the installation procedure. Specifying a response file, using the `-response:response-path` parameter, will override the default response file.

If you specify `-autocapture` on the `RSSetup` command line, your installation will initially select the product name identified in the previous `response.ini` file, but will allow you to select a new product for installation. A new `response.ini` file will be saved at the end of the installation procedure.

Preparing Multiple Response Files

You can save multiple response files to support attended installation of different products.

- 1 Identify a directory where you will store your response files. The following examples use a directory named as follows:

```
C:\responses
```

- 2 Record the response file for each product you want to install.
- 3 Rename the response file with a unique file name. For example, save the ClearQuest 2.0 response file as

```
C:\responses\ClearQuest2_0responses.ini.
```

- 4 Perform the installation and specify the path to the response file as a parameter to the `-response` switch. For example:

```
<Install Location>\setup\rssetup -silent  
-response:c:\response\ClearQuest2_0response.ini
```

Examples

See “Silent Installation of Rational ClearQuest” on page 113.

To record an installation of Rational ClearQuest version 2.0:

```
<Install Location>\setup\rssetup -autocapture /product ClearQuest-2.0
```

To remove Rational ClearQuest version 2.0:

```
<Install Location>\setup\rssetup /uninstall /product ClearQuest-2.0
```

RSSetup Command Syntax

This section provides the syntax for RSSetup, and well as a table of RSSetup command parameters.

Syntax

```
RSSetup [-silent [-response:response-path]] |  
        [-verbose [-response:response-path]] |  
        [-autocapture]  
        [/product <product>] [/install /uninstall /update]
```

RSSetup Command Parameter	Description
-silent	Performs a silent (unattended) installation.
-verbose	Replays a previously recorded installation, allowing you to override the recorded responses. Note: if you override the responses, those changes are not written to the response file.
-response:response-path	Specifies the path to the response file. response-path is the path for the response file. You must specify the response-path . The default path is <Install Location>\Setup\ RSSetup\response.ini, where <Install Location> is the location of the installation files.
-autocapture	Records your responses to a software installation, storing the responses in a file for later replay.
/product product-identifier	Specifies the product you are installing. This parameter does not apply for silent installations. For a silent installation, you specify the product name in the response file. See page 119 for the list of identifier you can use with this switch.

RSSetup Command Parameter	Description
/install	Installs the product you specified with the /product switch. This switch cannot be combined with /uninstall or /update. This parameter does not apply for silent installations. For a silent installation, you specify the product name in the response file.
/uninstall	Removes the product you specified with the /product switch. This switch cannot be combined with /install or /update.
/update	Updates the product you specified with the /product switch. This switch cannot be combined with /install or /uninstall. This parameter does not apply for silent installations.

The table below lists the product identifiers you must use with the /product switch.

Product Name	Product Identifiers
Rational LoadTest	atbuLoadTest
Rational Suite Performance Studio Agent	atbuPSAgent
Rational Suite Performance Studio	atbuRSuitePerformanceStudio
Rational Test Enablers	atbuSetupEnablers
Rational TeamTest	atbuTeamTest
Rational TestAccelerator	atbuTestAccelerator
Rational Robot	atbuTSRobot
Rational ClearQuest	ClearQuest-1.1
Rational ClearQuest TeamTest Edition	ClearQuestTeamTestEdition-1.1
Rational PureCoverage	coverageNT

Product Name	Product Identifiers
Rational Suite DevelopmentStudio for UNIX	dsbuRSDSU
Rational Developer Kit	dsbuDeveloperKit
Rational Purify	purifyNT
Rational Quantify	quantifyNT
Rational RequisitePro	rmbuRequisitePro
Rational RequisiteWeb	rmbuRequisiteWeb
Rational Rose Inline EJB Addin	Inline
Rational Rose Enterprise Edition	Rose98i
Rational Rose Professional C++ Edition	Rose98iC++Professional
Rational Rose Professional J Edition	Rose98iJavaProfessional
Rational Rose Modeler Edition	Rose98iModeler
Rational Rose Professional Visual Basic Edition	Rose98iVBProfessional
Rational Rose Professional Data Modeler Edition	RoseDataModelerProfessional
Rational Unified Process	ruObjectory51
Rational SoDA for Word	SoDA
Rational Suite AnalystStudio	wsbuAnalystEdition
Rational Suite DevelopmentStudio	wsbuDevelopmentStudio
Rational Suite Development Studio - RealTime Edition	wsbuDevelopmentStudioRT
Rational Suite Enterprise	wsbuEnterprise
Globetrotter FLEXIm License Server	wsbuFLEXImServer
Sybase SQL Anywhere Database Server	wsbuSQLAnywhereServer
Rational Suite TestStudio	wsbuTestStudio
Rational Suite Web Server Components	wsbuWebComponents

License Key Administrator Command Line

You can run the Rational License Key Administrator from a command line or batch file to automate your license key installations and configuration.

Additional detailed information about the License Key Administrator command line options and usage is available on the Rational Suite web site: <http://www.rational.com/products/rs/prodinfo/index.jtmpl>.

License Key Administrator Syntax

```
licadmin -ffilename.ext
```

Table 1: Licadmin Command Parameters

Parameter	Description
<code>-ffilename.ext</code>	Specifies the path to the license parameter file. The license parameter file specifies the name of the license key server that you will use. For example: <code>Server:group-license-server</code> The keyword <code>Server</code> is case-sensitive.

The status of the execution of this command is written to a file named `filename.ext_STATUS`, where `filename.ext` is the name of the license parameter file you used. The status file is created in the directory where you executed the `licadmin` command.

Example

- 1 Create a file that contains the following line:
`Server:group-license-server`
where `group-license-server` is the name of your FLEXIm License Server system.
- 2 Save the file as `server-info.txt`.
- 3 In a command window, run the following command:
`licadmin -fserver-info.txt`
Your system will be configured to use floating license keys from `group-license-server`.

Index

A

- Access 13
- access, URL to ClearQuest Web 98
- add-ins
 - upgrading 104
- anonymous user account 65, 77

C

- cache directory, ClearQuest Web 68, 81
- ClearCase
 - integration setup 44
- ClearQuest
 - installing 37
 - installing for admin 37
 - installing for clients 57
 - installing for Unix clients 55
 - installing for Windows clients 51
- ClearQuest Client
 - upgrading 108
- ClearQuest Maintenance tool, for
 - upgrading 104
- ClearQuest Visual SourceSafe
 - tool 46
- ClearQuest Web
 - and Microsoft Access 13
 - and software licenses 112
 - anonymous user account 65, 77
 - cache directory 68, 81
 - configuring IIS 69, 83
 - cookies 64
 - e-mail notification 94
 - installation 37, 51, 63
 - installation directory 71, 85
 - registry key 67, 79, 96, 97
 - URL 98
 - virtual directory 69, 83
- Client
 - IBM DB2 alias 35
- clients
 - enabling e-mail 61

- installing 57
 - installing Unix 55
 - upgrading 108
- ConText
- Oracle search option 30
- cqvss 46
- Crystal Reports
- installing 49

D

- databases
 - connecting clients 52
 - creating schema repository 39
 - locked after upgrade 102
 - migrating from SQL Server 6.5 27
 - sample database 41
 - setting up DB2 35
 - setting up Microsoft Access 11
 - setting up Microsoft SQL Server 6.5 19
 - setting up Microsoft SQL Server 7 or 2000 24
 - setting up Oracle 28
 - setting up SQL Anywhere 14
 - supported vendors 12
 - unlocking 105
- DB2
 - configuring for ClearQuest 35
 - creating a alias on a client machine 35

E

- e-mail
 - Rational E-mail Reader 48
 - submitting records 48
- e-mail notification
 - customizing 94
 - enabling for clients 61
 - enabling for Unix clients 61
 - enabling for Windows clients 54

e-mail rules
upgrading 104

F

fdg 55
fields
 searching multi-line with
 Oracle 30
FLEXlm License Manager 112
floating license 112

H

HKEY_LOCAL_MACHINE MDI
 window 67, 79, 96, 97

I

If 8
installation requirements 8
installing 7, 55
 ClearQuest for admin 37
 ClearQuest for clients 57
 ClearQuest for Unix clients 55
 ClearQuest for Windows
 clients 51
 ClearQuest Web 37, 51, 63
 Crystal Reports 49
 overview 9, 56
installing ClearQuest 37
integrations
 ClearCase 44
 Unified Change Management 44
 upgrading 104
 Visual SourceSafe setup 44

K

key, license 112

L

l 8
license key 112
licenses, Rational Software 112
locked, databases 105
login accounts
 anonymous user 65, 77

M

Maintenance tool, for upgrading 104
Microsoft Access
 configuring for ClearQuest 11, 13
Microsoft Access database 12
Microsoft SQL Server 7 or 2000
 setup 24
Microsoft SQL Server database 12
multi-line fields
 searching in Oracle 30

N

node-locked license 112
notification
 e-mail 94

O

Oracle
 configuring for ClearQuest 28
 ConText option 30
 searching multi-line fields 30
Oracle database 12
overview
 install process 9, 56
 upgrading 100

P

packages
 applying 104
path, ClearQuest Web 71, 85
production databases 107
profile
 creating for installation 42

R

Rational E-mail Reader 48
Rational License Administrator 112
readme, ClearQuest 12
records
 submitting via e-mail 48
registry key, ClearQuest Web 67,
 79, 96, 97
release notes, ClearQuest 12
requirements to install 8

S

- sample databases
 - creating 41
- schema repository
 - connecting clients 52
 - creating 39
 - upgrading 103
- searching
 - multi-line fields in Oracle 30
- server
 - Oracle 28
- serverDB2 35
- SQL Anywhere database 12
- SQL Anywhere set up 14
- SQL Server 6.5
 - configuring for ClearQuest 19
 - migrating to SQL Server 7 27
- SQL Server 7/2000
 - configuring for ClearQuest 24
- SQL Server database 12
- SQL*Net Easy Configuration 29
- Sybase SQL Anywhere database 12
- Sybase SQL Anywhere setup 14

T

- TeamTest 8

U

- Unified Change Management, integrating with 44
- Unix clients
 - enabling e-mail 61
 - installing 55
- upgrading 99, 107
 - ClearQuest Web 109
 - clients 108
 - options 102
 - preparation 101
 - schema repository and user databases 103
 - steps 103
 - task overview 100
- URL, ClearQuest Web 98
- user account, anonymous 65, 77
- user databases
 - upgrading 103

V

- virtual directory, ClearQuest
 - Web 69, 83
- Visual SourceSafe
 - cvvss 46
 - integration setup 44

W

- Web, ClearQuest
 - and Microsoft Access 13
 - cookies 64
 - installation 37, 51, 63
 - installation directory 71, 85
 - registry key 67, 79, 96, 97
 - software licenses 112
 - upgrading 109
 - URL 98
- web, ClearQuest
 - cache directory 68, 81
 - configuring IIS 69, 83
 - virtual directory 69, 83
- Windows clients
 - enabling e-mail 54
 - installing 51
- WWW directory, ClearQuest
 - Web 71, 85

